AN

INTRODUCTION

TO THE STUDY OF

INDIAN ECONOMICS

(SEVENTH EDITION)

8–10 thousand

Vol. I

VERIFIED

9 OCT 1990

BY

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... COLLEGE AND RESEARCH INSTITUTE
No. 33/77
13 ...
COIMBATORE

POONA:

ARYA BHUSHAN PRESS.

1930

AN INTRODUCTION

TO THE STUDY OF

INDIAN ECONOMICS.

Vol. I

BY THE SAME AUTHOR.

1 INDAN ADMINISTRATION
2 GOKHALE AND ECONOMIC REFORMS
3 INDIA'S WAR FINANCE AND AFTER-WAR PROBLEMS
4 CURRENCY REFORM IN INDIA
5 INDIAN INDUSTRIAL AND ECONOMIC PROBLEMS
6 THE REFORMS EXPLAINED
7 THE DAWN OF MODERN FINANCE IN INDIA
8 ECONOMICS OF PROTECTION IN INDIA
9 ECONOMICS IN INDIA

FIRST EDITION, JUNE, 1917.
SECOND EDITION, MAY, 1918.
THIRD EDITION, AUGUST, 1920.
FOURTH EDITION, SEPTEMBER, 1922.
FIFTH EDITION, SEPTEMBER, 1925.
SIXTH EDITION, AUGUST, 1927.
SEVENTH EDITION, MARC

*Printed and published by Anant Vinayak Patwardhan
at the 'Aryabhushan Press', House No. 936/2,
Peth Bhamburda, Poona City.*

PREFACE.

In its present, the seventh edition, this book appears in an enlarged and improved form. It has grown in size and contents as much with its appreciation by a steadily widening circle of students and with increasing experience of their needs and requirements as with the rapid economic developments taking place in the outside world and in India. The warm reception which the first four editions of the book met with at the hands of University students and the general public all over the country, testified to its having satisfied a real want, and the author felt encouraged to bring out a fifth edition in a larger size and with a comprehensive treatment of the subjects dealt with. The opportunity was fully availed of to give effect to many of the suggestions which had been received. The desire had been generally expressed that ampler information and more statistics bearing upon the various topies handled, should be supplied and that all the important problems arising in the course of discussion, should be accorded greater space and prominence. The text was, therefore, revised throughout, and considerable additions were made to it in several places. The fundamental principles underlying economic phenomena were explained in each chapter and the working of economic laws in relation to collective and individual activities in India was indicated so as to assist intelligent understanding and the pursuit of scientific and fruitful study. The elements of diversity and unity in the conditions prevailing in the country and the directions of social and economic evolution were clearly brought out everywhere.

The effects of the war and the depression succeeding it, upon capital, labour, finance, currency, exchange, banking, prices, employment and consumption, were of a far-reaching character and they were appropriately pointed out. The problems of food supply, population, poverty, protection, Imperial preference, agricultural indebtedness, railway management and finance, trade unionism, international labour organization, public debt, provincial finance, foreign exchanges, increased taxation &c. were exhaustively dealt with. The latest available facts and statistics were given everywhere; and divergent views on controversial questions were referred to and discussed. And no pains were spared to bring the book up to date and to render it helpful to different classes of readers. The

summaries and the tables introduced for the purpose of effective illustration and added in the copious Appendices, were calculated to enhance the utility of the book. The bulk of the text indeed increased a great deal as a result of the improvements mentioned above and the book was issued in two volumes of convenient size. In this, the seventh edition, further improvements have been introduced and care has been taken to deal with the latest phases of the economic development of India, e. g. changes in relation to finance, banking, agriculture, currency, exchange, tariffs, taxation, consumption and unemployment.

One improvement in this edition, which deserves notice here, consists in the special effort made to attain more effectively the two-fold aim which the Author has placed before himself, viz the treatment of the economic problems of India as integral parts of the economics of the Indian nation and their discussion on the basis of the principles of economic science evolved and approved by the latest development of thought. The author has drawn upon the most recent oiginal works of economists in Germany, France and other continental countries, and has received considerable assistance from them for the purpose of illustration and comparison and also by way of inspiration. He is grateful to these leading European economists some of whom have expressed to him their appreciation for his work. The appendices to the various chapters are calculated to guide the advanced student in the intensive pursuit of problems dealt with in them.

Almost all the Indian Universities have prescribed, in one shape or another, the special study of the economic conditions and problems of India, and these two volumes are intended to provide adequate guidance for the purpose. The University of Bombay has expanded its course of studies in Indian Economics for B. A. Honours, and this book will be found fully to cover it and also the M. A. course in the subject. The general reader will likewise benefit by the help the book will render in understanding the public questions of economic import which arise from time to time and call for proper solution. With the political and social development now going on with rapid strides in the country, such questions are coming into greater prominence and are evoking a more lively interest; and this new edition, it is hoped, will better facilitate the attainment of the Author's object in writing the book.

CONTENTS.

PAGES

PREFACE ... i–ii

CHAPTER I.

Introductory :—

1 Nature and Scope of the Subject ... 1—3
2 The Position Cleared up ... 3—6
3 Methods of Study and Teaching ... 6—8
4 The Plan of the Work ... 8—9

CHAPTER II.

National Economics :—

5 Pioneering Work ... 10–11
6 Indian View-Point Defined ... 11–13
7 Nationalism ... 13–15
8 Internationalism in Economics ... 15–17
9 Trend of Economic Thought ... 17–20
10 The Indian Problem ... 20–21
11 Indian Ideals ... 21–23
12 Theory and Practice ... 23–25
13 Some Practical Questions ... 25–27
14 Conclusion ... 27–30
Appendix : Economics in India ... 31–46

CHAPTER III.

The Indian Outlook :—

15 Progress ... 47–49
16 Wealth and Welfare ... 49–51
17 Pessimism and Progress ... 51–53
18 Ethics and Economics ... 53–55
19 Position in India ... 55–57
20 Evidence of History ... 57–59
21 A Comparison ... 60–61
22 The Ideal and the Actual ... 61–63
23 Cultural Adjustment ... 63–65
24 Indian Spirituality ... 65–67
25 Indian Sociology ... 67–71
26 Economic Motive and Activity ... 71–73
27 Indian Economics ... 73–75

CHAPTER IV.

Gifts of Nature :—

			PAGES
28	Economic Wealth	...	76–78
29	Importance of Production	...	78–80
30	Physical Features	...	80–82
31	Striking Characteristics	...	83–84
32	*Climate, Soils* and *Crops*	...	*84–90*
33	Forests	...	91–93
34	Their Economic Value	...	93–95
35	Mineral Resources	...	95–97
36	Coal, Iron and Pertroleum	...	97–100
37	Motive Pewer	...	100–102
38	Land	...	102–105
39	*Pressure on the Land*	...	105–108
40	Fertility of the Soil	...	108–110
41	Value of Land	...	110–112
	Appendix : Indian Minerals	...	113–141

CHAPTER V

***Human Effort* :—**

42	Value of Labour	...	142–143
43	The Labour Factor	...	144–147
44	Labour Efficiency	...	147–149
45	Occupations of People	...	149–152
46	*Different Classes of Labour*	...	153–154
47	Agricultural Labour	...	154–156
48	Handicrafts	...	156–159
49	Organized Industries	...	159–161
50	Traditional Training	...	161–163
51	Present Requirements	...	163–165
52	Technically Trained men	...	165–166
53	Prospects	...	166–169
54	Supply of Labour	...	169–171
55	The *Depressed Classes*	...	171–174
56	Economy of Labour Power	...	174–176
57	Adaptation to Needs	...	176–178
58	Comparative Efficiency	...	178–179
59	Conclusion	...	179–182

CHAPTER VI

Capital :—

60	What *is Capital ?*	...	183–185
61	Supply of Capital	...	185–187
62	Capital in Agriculture	...	187–190
63	Use of Agricultural Capital	...	190–193
64	The Role of the State	...	193–194

			Pages
65	The Cattle Problem	...	194–198
66	Improved Implements	...	199–201
67	Small Industries	...	201–203
68	Large-Scale Manufactures	...	203–205
69	Existing Facilities	...	205–206
70	The 'Hoarding Habit'	...	207–208
71	Conditions of Saving	...	209–210
72	Power of Capital	...	210–212
73	Foreign Capital in India	...	212–215
74	Capital and Banks	...	215–218
	Appendix : Foreign Capital in India	...	219–222

CHAPTER VII.

Organization of Production :—

75	Function of Organization	...	223–225
76	Home Industry	...	225–227
77	The Manufactory	...	227–229
78	Large-Scale Production	...	229–232
79	Joint-stock Companies	...	232–233
80	Statistics	...	233–236
81	Organising Enterprize	...	236–239
82	Training and Experience	...	239–341
83	Vitality of Cottage Industries	...	242–244
84	Process of Evolution	...	245–247
85	Division of Labour	...	247–249
86	Caste	...	249-251
87	Ancient Indian Guilds	...	251–253
88	Guilds and Castes	...	253–255
89	Farming	...	255–258
90	Sub-division of Holdings	...	258–261
91	The Tragedy	...	261–264
92	The Charkha Movement	...	264–267
93	Limitations and Possibilities	...	268–271

CHAPTER VIII.

Production and Population :—

94	Increase of Population	...	272–274
95	Varying Conditions	...	274–276
96	Malthusian Doctrine	...	276–279
97	Indian Conditions	...	279–281
98	Pressure of Population	...	281–284
99	High Prices and Food Supply	...	284–286
100	Population and Food	...	286–290
101	Recent Statistics	...	290–292
102	Supply Inadequate	...	292–295
103	Famines		

			Pages
104	Cause and Cure	...	297–300
105	Unemployment	...	300–303
106	Remedies	...	303–305
107	Indian Attitude	...	305–307
108	Changed Conditions	...	307–310
109	Vicious Circle	...	310–313
110	Conclusion	...	313–316
	Appendix: The Population Problem	...	317–327

CHAPTER IX.

Trade and Economic Transition:—

111	Transition	...	328–330
112	Importance of Trade	...	330–332
113	World-Trade and India	...	332–336
114	Exchange	...	336–337
115	Markets and Fairs	...	337–339
116	The Trader	...	339–341
117	*Ancient Indian Commerce*	...	341–343
118	Under Company Rule	...	343–345
119	Railways and Irrigation	...	345–347
120	Features of External Trade	..	347–349
121	War and Foreign Trade	...	349–351
122	Industrial Revolution	...	351–354
123	Theory of Exchange	...	354–356
124	Effects of the Revolution	...	356–357
125	Trade Statistics	...	357–362
126	Advantages of Trade	...	362–364
127	Balance of Trade	...	364–366
128	India's Alleged Gold Hunger	...	366–369
129	Conditions of Beneficent Trade	...	369–371
130	Trade Organization	...	371–373
131	Improved Marketing	...	373–377
132	Communications and Transport	...	377–380
133	Roads and Railways	...	380–383
134	Railways and Trade	...	383–387
135	Trade of the Ports	...	387–389
136	Trade of the Interior	...	389–391
137	Internal and Coasting Trade	...	391–393
138	Shipping	...	393–396
139	Shipping and State aid	...	396–399
140	Indian Mercantile Marine	...	399–401

CHAPTER X.

Trade, Tariffs and Industries:—

141	Freedom of Trade		
142	State Regulation		

			Pages
143	Colonial Policy	...	406–408
144	Commercial Treaties	...	408–411
145	The Rival Views	...	411–415
146	Indian View	...	415–417
147	History of Indian Tariff	...	417–419
148	Brith of Indian Protectionism	...	419–421
149	*Right Policy for* India	...	421–424
150	Indian Protectionism	...	424–428
151	Fiscal Dependence of India	...	428–431
152	Imperial Preference	...	431–432
153	Indian Government's Attitude	...	432–434
154	Fundamental Principles	...	434–436
155	The Transition	...	436–438
156	Industrial Policy	...	439–440
157	State Purchase of Stores	...	440–443
158	Industrial Inquiry	...	443–445
159	The Fiscal Commission	...	445–447
160	India Becomes Protectionist	...	447–449
161	Protection in Operation	...	449–452
162	Steel and Imperial Preference	...	452–453
163	Cotton Textile Industry	...	453–455
164	Position and Prospects	...	455–457
	Appendix: (A) Report of the Indian Fiscal Commission	...	458–468
	„ (B) External Trade of India in 1928–29	...	469–475

INDIAN ECONOMICS

CHAPTER I

INTRODUCTORY

I. Nature and Scope of the Subject :—Economics is a social science which deals with man's activities in relation to the satisfaction of his material wants. Man is a complex animal; and his actions in the material sphere of life, as a member of the family, of the community and of the nation, are, both individually and collectively, of sufficient importance to merit separate consideration. The science of Economics isolates this species of social phenomena, analyses and arranges them, traces their connection with one another and deduces certain conclusions from them with regard to their motives, their interdependence and their working. Economic theories which were at one time treated almost as dogmas, true for all times and conditions, are no longer held to possess universal and unconditional applicability. Economists are, however, agreed that they do apply to an extensive range of phenomena over a wide social field, subject, of course, to limitations of time, space and individuality; and the claim of Economics to the status of a full-blooded science is not now disputed even by its worst critics. The qualification of the term Economics by the word 'Indian' will, in these circumstances, appear to detract from the position the science occupies, and it is no wonder that to some the very name of 'Indian Economics' sounds as 'uncouth, as infelicitous and as misleading.'[1] It is argued that there can be only one Economics as 'there is only one Mathematics, one Physics, one Chemistry, one Anatomy and one Physiology'; and the study and teaching of 'Indian Economics' as a separate subject is consequently deprecated. What does the term 'Indian Economics' then signify?

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1 See Prof. P. Anstey's Paper in the Proceedings of the Indian Economic Association's Conference held in Madras in 1919-20.

'Indian Economics' may possibly mean one of three things: (1) it may, first, connote a body of thoughts and doctrines expounded by Indian speculators and scholars in ancient and mediaeval times and may, therefore, be placed in the same category as Indian Medicine, Music and Astronomy; (2) secondly, 'Indian Economics' may mean, as distinguished both from the western Economic Science and from the above, a system of ideas and principles recently formulated so as to create a new, an independent and a rival science of Economics peculiarly in consonance with the characteristic culture and material condition of the people of this country; and (3) thirdly, it may mean a school of modern Indian economic thought which seeks to amplify, correct and supplement the economic theories and policies which have found general favour in the west, in the light of conditions peculiar to this country and the followers of which draw upon their own experiences and work out conclusions according to their own ideas as to the social development, the immediate needs and the ultimate destiny of their countrymen. Now, as regards the first among the above connotations, there is ample evidence to show that ancient Indian scholars had developed a systematic body of thought which they called the science of wealth (Vârtâ) and which, we learn, discussed the problems of agriculture, cattle-breeding and trade. Though independent works on this science have not yet been discovered, economic ideas are found scattered throughout the works on Arthasastra and Niti and in the Epics and the Smrities. Chanakya, the author of the 'Arthasastra', indicates the importance of Vârtâ by observing that 'it is most useful in that it brings in grain, cattle, gold, forest produce and free labour' and that 'it is by means of the treasury and the army obtained solely through Vârtâ that the king can hold under his control both his and his enemy's party.' The 'Arthasastra' of Chanakya, attributed to the fourth century B. C., may be profitably compared with the writings of European Mercantilists and Kameralists of the seventeenth century, and that ancient Indian statesman may be taken to have anticipated the exposition of what modern German authors distinguish as 'staats-wirtschaft' or state economy. The growth of this science was obviously arrested, and modern Indian thinkers have had to make a fresh start, the ancient Shastras having now more or less only a historical interest.

The second interpretation errs in attributing too much to Indian Economics, and the criticism referred to in the beginning of this

section may, therefore, seem to be justifiable. But a moment's reflection will show that the objection is due to a misunderstanding and that the criticism is merely a fight about words. As will be shown presently, however, Indian Economics can be spoken of as a school of economic thought like those which have flourished in the west during the last century. It is, therefore, the third sense in which the term is ordinarily used and understood, and no Indian economist has, as a matter of fact, cherished the vain ambition to create an altogether new science of Economics out of Indian materials. But the aspiration is legitimately entertained to create in India a specific body of economic thought which will take proper account of and lay special stress on the characteristically Indian outlook on life and the peculiar conditions, motives, practices and institutions of the Indian people. The dictionary meaning of the word 'economics' is two-fold. It means both 'the practical science of the production and distribution of wealth' and 'the condition of a country as to material prosperity'. The latter meaning is predominant when we use that word in connection with the Indian nation as it is when we likewise speak of railway or rural economics, for instance. The term 'Indian Economics' is not entirely a neologism, and, it is important to bear in mind, it enjoys the advantage of having had a long vogue and concisely expresses the meaning it is intended to convey. An exposition of economic doctrines formulated by British economists and a study of economic problems of special interest to England have thus been characterised as 'English Political Economy' and 'British Economics',[1] and there is no reason why any one should boggle at 'Indian Economics.' Special attention is being devoted, for example, to the study of the economic organization of Germany,[2] and we find provision made for the teaching of "National Economics of Ireland", at the University of Dublin.[3]

2. The Position Cleared Up:—The manner in which economic thought has developed in the course of the past century and

1 "The particular Political Economy which I have been calling the English Political Economy is that of which the first beginning was made by Adam Smith."—Walter Bagehot in "The Postulates of English Political Economy." See also "British Economics" by W. R. Lawson.

2 "Strukturwandlungen der *Deutschen Volkswirtschaft*" in 2 Volumes, edited by Dr. B. Harms.

3 "Agricultural Economics" by George O'Brien, Professor of National Economics of Ireland, University College, Dublin.

a half in the west, will prove very suggestive in this connection. Various schools of economic thought have flourished side by side and in succession to one another ; and the fact is deplored that the divergence of view among them regarding the very fundamental principles, is a serious drawback in comparison with the harmony prevailing in the positive sciences. The classical, the historical, the socialist and the other schools have revolted and warred against one another, and the practical policies suggested by them are obviously as much in conflict as their theories. The very basic conceptions have been challenged, the correctness of the methods of investigation and study has been questioned and the soundness of the conclusions reached has been disputed. The need of adopting a new vision and of overhauling the existing economic system, was brought home with still greater directness and force by the experiences of the last war, and the events and the discussions of the post-war period have proved no less instructive.[1]

'Indian Economics' owes its birth to a similar movement of thought and intellectual revolt.[2] It was, in its origin, a protest against the policy of the political authority in India which, by its sins of omission and commission, proved to be out of accord with the requirements of the healthy economic advancement of the people as well as the natural, the cultural and the social conditions of the country. It was out of the reasoned conviction of the earlier students of Indian economic problems that theories developed in the strange atmosphere of the west were inadequate and inapplicable in the dissimilar surroundings of India that 'Indian Political Economy' was born in the closing decades of the last century. As it grows, it can not be content with playing only a negative role in exposing the weaknesses and deficiencies of the western doctrines as they are applied to the economic condition of the country. It labours to collect accurate facts, attempts a new analysis and synthesis of the different social factors and tries to evolve a connected body of thought with a view to point the way to a healthy path of progress. No unanimity can, of course, be expected among Indian thinkers any more than among western economists, but however they may differ, and wide divergence of view is inevitable, there will be general agreement among

1 "Die Wirtschaftswissenschaft nach dem Kriege"— Festgabe fur Lujo Brentano.

2 See the Author's "Economics in India."

them with respect to the need of bringing an independent outlook to bear on their task of investigation and reconstruction. Unquestioning acquiescence and slavish or idle imitation are to be deprecated. The Indian school of economics has its work cut out, and it is calculated not only to prove beneficial to the progress of this country but to make a valuable contribution to the economic thought of the world.

The discussion in the following chapter will throw further and much useful light on the subject, but it will be worthwhile before leaving it here, to make a few more observations. It is argued by some that since economic conditions in this country are rapidly approximating those prevailing in the west, there is no more need for a special discipline such as Indian Economics and that, in any event, Indian Economics, while it may legitimately be a study of particular facts, statistics and phenomena, can not connote any peculiar attitude, outlook or method. Now, it has been shown above, that the valuc of intensive study of economic conditions pertaining to an industry or an area or to a nation as a whole, can not be denied, and such studies are common everywhere. But however similar conditions in the different parts of the world may be in important respects, it is generally recognized that each people has peculiarities of its own in matters political, social and economic which are deserving of investigation. Further, it can not be pretended that there is universal and complete agreement among economists as to the aim and the methods of their science and particularly the application of its principles. Economic policies which are so vital to the well-being of a nation, depend entirely on aims, methods and attitude, and it is of the utmost importance that in a country situated as India is, the scientific character of economic goal, action and policy should be thoroughly discussed. This is, to our mind, a fundamental feature of Indian Economics which is thus a connecting link between the theories of Economics as a pure science and the mere facts of Indian life. It has been further suggested that the term a study of "Indian Economy" would be a good substitute for Indian Economics. This proposal is certainly in keeping with the usage adopted by German writers who speak of *Die Deutsch Wirtschaft* and *Die englische Wirtschaft*[1] but it does not bring out all we want, and

1 Hermann Levy: *Die englische Wirtschaft.*

for reasons already given and to be further given in the following chapter, we prefer our own terminology to such titles as a study of Indian economy or even of Indian national economy.

3. Methods of Study and Teaching:—It is obvious that the work will, therefore, be descriptive as well as reflective and it need hardly be added that no theories can be deduced without a careful ascertainment and study of facts. 'Indian Economics' may, therefore, finally be taken to signify a study of the problems of material development which confront the Indian people in the present stage of economic evolution, with the background of their chequered but continuous history of three thousand years and with the prospect of a drift or a plunge into the conditions and ideals of modern western civilization. It implies the ascertainment, investigation and examination of the facts and tendencies of social life in its material aspect, with due regard to their steadily growing complexity and the formulation of a body of views evolved from the scrutiny of the observed phenomena both in respect of underlying principles and requisite national policies. The adoption of a suitable combination of the inductive and the deductive methods of reasoning will be found as useful in India as elsewhere and it will free the work of the student from the fault of futility on the one side and of dogmatism on the other.

With regard to the study of Economics in this country it is stated that the usual teaching of the subject in our Colleges is based upon text books written with reference to western conditions and experiences and that it is not properly correlated to Indian social phenomena. Wherever this complaint may be well-founded, it is, in part at least, the fault of the teacher who must guide his pupils in interpreting economic facts of daily life, must illustrate principles by referring to indigenous conditions and must indicate how to derive correct conclusions from given data. Right educational methods require that in order that the study of Economics may prove stimulating and fruitful, it should be intimately associated with the surroundings and the observations of the learner. To a certain extent it is true that the average University student does not yet feel disposed to travel beyond his text books and to observe and analyse things for himself. It is equally true that there is too much of lecturing on the part of teachers and very little thinking and reading on

the side of pupils. The educational system in which the student is brought up, is mainly responsible for this state of things. But if the interest of students in their surroundings is roused by methods of teaching which stimulate observation and provoke reflection, they are found to go wide and deep into their work and to realise that the University examination is only a by-product and not the chief aim of their activities. Economics must not, therefore, be taught and studied apart from local and national conditions as if it were a foreign science without much relation to Indian life except in its aspects of modern industries, external trade and foreign exchanges.

Economic phenomena like cartels and trusts, unscrupulous and universal competition, extreme specialization, widespread unemployment among the working classes, the invasion of various occupations by women, socialism in its various forms, Malthusianism, commercial and financial speculation, unblushing profiteering, corners in goods and securities and the like, being typically western, may appear to belong to a different category; and Indian students may find it difficult to understand them second hand. But we do not refrain from teaching the German or the American constitution to our students of Politics on the ground of their being outlandish. The above phenomena have, besides, actually appeared in India; and their study has a special interest and value at the present stage of the country's development. Nothing can, however, render superfluous a specialized and intensive study of Indian economic conditions and problems, and our University has done wisely in including 'Indian Economics' in its curriculla for the B. A. and M. A. examinations. Other Universities too have provided for such studies, and in some of them the application of economic principles to Indian conditions, is made a special feature of teaching and examination. The economic evolution of the Indian communities under the stress of modern developments and the urgent requirements of progress, demand patient investigation and suitable action; and it is necessary that the number of educated people who can take an intelligent interest in economic problems should steadily increase in India. It is the main object of this book to help the student to observe and interpret the facts and tendencies of Indian life, to assimilate economic principles and to apply them to his own experiences and observations. It is likewise designed to assist the general reader to secure a working knowledge of India's economic

evolution, position and prospects. The book is thus calculated to appeal as much to the large public of intelligent and educated Indians who have to take part in and guide national affairs, as to University students.

4. The Plan of the Work :—The general order of treatment usually found in text-books on Economics, has been followed with a view to conduce to the convenience of the student, but in doing so, care has been taken to bring into prominence chief among the peculiar economic problems which require close study and demand a solution in this country. A firm grasp of the principles of economic science and of their connection with the actual facts of life, is essential; and the book is not, as is often the case, a loose throwing together of dissertations on a number of questions of public interest. The fundamental principles have been, therefore, briefly indicated in each place, and their application to Indian conditions has been pointed out. The history of the economic changes which have taken place and which are in progress, has been traced, and the situation in India is compared with the development and position in Western countries. Special attention has been drawn to the economic evolution which has been going on slowly, and at times, imperceptibly, and the basic ideas underlying institutions, and the motives inspiring activities, have been thrown into relief. While a discussion of issues of a purely political character has been avoided as being irrelevant, the bearing of political authority and national outlook on the solution of economic problems, has been carefully indicated. Very few people in India realise the nature and the working of even the simple laws which govern the production, exchange, distribution and consumption of wealth or are acquainted with the modern machinery of industry, trade, currency, credit, taxation and finance. This ignorance lands people into curious mistakes when they try to tackle economic problems and it may sometimes produce serious consequences; and in any case, it hampers all attempts at the amelioration of existing conditions and the promotion of further progress. No less obstructive and dangerous is the easy optimism of those who are led away by appearances and draw comforting conclusions both from the contrast and the analogies presented by Indian conditions when compared with those prevalent elsewhere. This book, it is hoped, will supply a corrective to both these tendencies, and will afford a true insight into the economic situation of India.

The author has freely stated his own views on each question—this was inevitable and even necessary—and has also given reasons why he holds them. He has, however, not done this obtrusively and has taken pains to place the pros and cons in each case before the reader so as to stimulate thought and rouse a spirit of enquiry, and to help him to form an opinion for himself. The reader is referred, in each chapter, to the literature he may consult if he wishes to prosecute his studies further, and the student will find the references helpful in acquiring a more intimate acquaintance with the subjects of study. Lengthy extracts from works referred to, have been avoided and quotations have been made only where they were deemed essential. Only very recently has the importance of economic studies come to be appreciated, and the provision made for them in the Universities is yet far from adequate. Good text-books are very few,[1] and the information pertaining to different subjects, where available, is scattered through a large number of blue books, reports, monographs etc. The materials are scanty and not easily accessible, and adequately stocked and up-to-date libraries are rare. The Indian student, therefore, suffers seriously from such difficulties, and reform is urgently called for in all these respects. The methods of teaching, it has been pointed out above, require considerable improvement. Investigation and study have to be directed along right lines and the equipment essential for the attainment of this object has to be amplified. The purpose of writing this book will be fully served if it succeeds, in a measure, in diffusing enlightenment, exciting a desire to know more and in creating a taste for investigation and independent thinking.

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Walter Bagehot: *The Postulates of English Political Economy*; W. R. Lawson: *British Economics*; Ranade: *Essays in Indian Economics*; Dadabhai Nowroji: *Poverty and un-British Rule in India*; G. V. Joshi: *Writings and Speeches*; Prof. Radhakamal Mukerji: *Foundations of Indian Economics* and *Comparative Economics*; Ketkar: *Indian Economics*; *Reports of the Proceedings of the annual Conference of the Indian Economic Association.*

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1 The leading text-books may be mentioned here:—Jadunath Sarkar: *Economics of British India*; Pramath Nath Banerjea. *A Study of Indian Economics*; Brij Narain: *Essays on Indian Economic Problems*; Wadia and Joshi: *Wealth of India*; Bhatnagar: *The Bases of Indian Economy*; Sapre: *Essentials of Indian Economics*; Jathar and Beri: *Indian Economics.*

CHAPTER II

NATIONAL ECONOMICS

5. **Pioneering Work** :—Early history of British rule in India is the history of territorial expansion and administrative adjustment. As the major part of India steadily passed into the hands of its British conquerors, vigorous efforts were made by the rulers to establish peace and order and to create an efficient machinery of administration. Indigenous institutions were preserved, modified or displaced by new ones as suited the principal object in view. Means of communication were extended and improved, trade was encouraged and the system of taxation was overhauled. The people were awed and dazzled by the changes wrought by the hands of the new administrators and hardly realized, at the time, the significance of the process of the silent evolution which was set going. The chief aim of the policy of Government was to give to the people of the country security of life and property and efficient administration which were non-existent in the times that immediately preceded the advent of British rule. The idea that this was all that was due from Britain to India and that this Asiatic Dependency was a fruitful field for legitimate economic exploitation, was consistent not only with the then prevalent conception of the relation of the sovereign state with its subordinate colonies and 'plantations' but with the approved doctrines of the dominant school of English economists. As western education spread, the eyes of the people who had benefited by its enlightenment, began to be opened to the serious situation created by the changes that were taking place around them.

The educated class, who numbered a very few men in those days, frankly admitted the blessings of British rule. They could not fail to perceive, however, that the indigenous industries were languishing on account of foreign competition, that India's external trade consisted mainly of manufactured imports and the export of the country's raw materials, that the taxes on land were burdensome and that devastating famines were of frequent occurrence. They

likewise observed that the exclusion of Indian talent and intelligence from all positions of responsibility, power and profit in the administration, the trade and the industries of the country, which was imposed by foreign rule, meant the moral and material degeneration of the people. Acquaintance of educated Indians with the theories of Economics propounded in the writings of western scholars and their own reflection on surrounding conditions and contemporary events, especially in the light of the progress that was being achieved on the European continent and in the United States of America, led to studies in comparisons and contrasts, to destructive and constructive criticism and to action in the limited sphere of popular activity. British statesmen in England and administrators in India had, on occasions, themselves expressed divergent views on the economic and moral effects of British rule on the Indian people and the goal of British policy.[1] Comment on the poverty of the country and criticism of its foreign exploitation were the dominant notes of the writings of Indian publicists, and their constructive proposals related to the stopping of the material and moral 'drain' entailed by the policy of British rule and the reform of the fiscal and of the land revenue and currency systems. Dadabhai Nowroji, Dinsha Wacha, Romesh Chandra Dutt, G. Subramania Iyer and G. V. Joshi were the chief pioneers in this work of criticism ; and their writings betray the conviction that the whole Indian economic world was out of joint and that a determined and radical cure was urgently needed.

6. Indian View-point Defined :—Though these students of the economic condition of India had glimpses of the veiled region of the primary causes of the social disturbance and economic deterioration, it was the master mind of Ranade which penetrated to the inwardness of the whole position and saw it clearly in all its bearings. He realized that the decadence of indigenous industries, the poverty of the masses, the recurrence of famines, the indebtedness of the cultivators, the burdensomeness of taxation and the growing ruralization of the country were all due to the working of unperceived and unregulated forces set in motion by British conquest, the State's wrong conception of its duties and functions and to the unsuitableness of its policy and measures to the conditions

1 Consult Dadabhai Nowroji's 'Poverty of India.'

which had to be faced. Ranade was deeply impressed with the revolt which thinkers in the countries of the European continent and in the United States of America had declared against the view of the English writers of the Orthodox or the Classical school that the principles of Economics as they had enunciated them in their text-books were universally and necessarily true for all times and places and for all stages of advancement. He felt that in matters of state policy as regards the healthy ecomomic development of India, the conditions of life in this country were more faithfully reproduced in some of the continental countries and in America, than in 'happy England, proud of its position, strong in its insularity, and the home of the richest and busiest community in the modern industrial world'.[1] In his lecture delivered in 1892, which has now become a classic, he, therefore, pleaded for a departure from the time-honoured maxims of the rigid economic science and for the initiation of Indian Political Economy reinforced with the latest theories e. g. the doctrine of relativity and preferring the claim of collective welfare to individual interest.

Indian Economics, launched under such auspices, is fortunate in having had the advantage of the experience of other countries, old and young, and of the knowledge of the theories propounded by economists of various schools. It can not and does not owe allegiance to any particular school of thought and does not adopt any system of doctrines wholesale. It is eclectic, constructive and creative. The thoughts of each school of Economics will always take a local colouring, and Indian Economics is bound to show a decisive leaning towards the National School of Economics. The emergence of a consciousness of a common nationality created by the community of vital interests and sustained by subjection to common laws and government, is a striking feature of the recent history of India. Though racial, communal and caste rivalries mar the growth of national harmony from time to time and serve as a reminder of the vastness, the diversity and the complexity characteristic of the country and its inhabitants, it is admitted on all hands that the future of India depends on the degree of national solidarity that may be attained by the people. In spite of physical, racial, religious, linguistic and administrative diversities, India is a unit in

1 **Essays in Indian Economics.**

matters of foreign trade, large-scale industries, public debt, currency and exchange, railways, defence, labour legislation and the bulk of taxation and State expenditure; and the industrial, fiscal, commercial and financial problems of a federal State of India need a distinctive kind of treatment, from the external as well as the internal point of view. The danger of leaving the sub-continent of India exposed to the forces of unrestricted competition and the operation of the so-called natural laws of the classical economists, has been strongly impressed on thinking minds. Nationalism is now the arresting note of Indian political and economic thought.

7. Nationalism :—The history of political thought and organization in the west reveals some very interesting ideas and facts concerning nationalism. The ideal of universality fostered by the Roman Empire and promoted by the Catholic church, broke down under the pressure of the barbarian tribes who overspread the European continent and carved out the German, the French, the Spanish and the Anglo-Saxon nationalities within definite territorial limits. Mercantilism was the outward expression of the new born consciousness of independence and the mutual political and commercial rivalries of the new nations; and economic restriction and regulation, both in internal affairs and external relations, became the order of the day in Europe. The reaction against this regime of repression of freedom was led by the Physiocrats and the Classical economists who ushered in the era of individualism, unrestricted competition and free trade. Thoughtful men on the continent and in America who compared the backward condition of their people with the advanced state of Great Britain, felt convinced that theories and policies which were good for England, proved detrimental to the particular interests of their own nations. In their writings they discredited British faith in the efficiency of freedom of competition and in the sufficiency of the spontaneous acts of individuals for the progressive improvement of the human race as an illusion and developed strong nationalist systems of thought and policy. State interference for the common good of the people and the deliberate protection of national industries and trade by the restriction of individual freedom of action, came to be widely favoured, and the impossibility of achieving the general progress of the world by overriding national boundaries was demonstrated.

In spite of these developments, it was believed that the interdependence, inherent in the modern far-flung and delicate system of international trade, credit and banking, had guaranteed universal peace and rendered the outbreak at least of a European war an impossibility.[1] That faith was shattered by the recent disastrous struggle. In a sense the war has vindicated the truth of the proposition that it hardly pays a nation to make war under modern conditions. The defeat of Germany appeared to be the victory of efforts to reconcile individual nationalism to peaceful internationalism. The huge losses and the enormous suffering caused by the world-war, brought home to all minds the crying need of international co-operation and solidarity, and the League of Nations is the tangible outcome of the universal reaction of feeling. It is, indeed, arguable that Germany's aggressive nationalism might have succeeded if it had been pitted against a small and weak power, and this idea receives confirmation from the special care taken, on the close of the war, to recognize and protect small nationalities. In spite of every thing that may be said on the other side, it has to be admitted, however, that the consciousness of an exclusive nationality and of separate national interests, is deep-rooted among all peoples, and it is out of conflict that co-operation in the international relations of the world, as it stands to-day, has to be created. The events which have recently taken place in international politics, the separate commercial treaties made by different powers, the difficulties which the League of Nations has had to encounter, the attitude of the United States of America towards Europe and the occurrences in China lend strength to this view. And one of the most curious phenomena in Europe and outside to-day is that in an atmosphere of internationalism there are in existence more independent nations and separate tariff walls in the world than before the war. The position India occupies is unique in several ways. As a nation in the early stages of consolidation and on a very low plane of material prosperity, she has extensive ground to cover in order to rise to the level of other peoples. Though their country has the advantage of being a member of the British Empire, Indians are only just beginning to secure some measure of control over their own economic destiny. India's economic relations with countries within and outside the Empire have, therefore, to

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1 See Norman Angell's works.

be regulated so as to conduce to the best interests of her people ; and these considerations fall within the proper sphere of Indian Economics.

8. Internationalism in Economics :—It has been pointed out above that the interdependence of nations and the world's solidarity were never more strongly emphasised than they were on the close of the Great War, by the utter exhaustion and economic helplessness of European countries resulting from the collapse of the well-established commercial and industrial system which had developed in the west in the course of generations. The recognition of the need to work in harmony and to take concerted action for the benefit of all, is reflected in the establishment of the League of Nations, the organization of the Labour Conference and the holding of other international conferences like those of Washington and Genoa all meant for the purpose of hammering out solutions of delicate questions by friendly discussion and cooperation. If the pronouncements of representative statesmen could be taken seriously, one would think that a new era of international amity and concord had dawned, and the age-old, selfish national ambitions and commercial rivalries and jealousies had become things of the past. The covenant of the League of Nations is a document that is calculated to create the impression that the leading powers of the world are bent upon making a heaven of this earth, and that as an original member of that organization, India is going to share the credit and the benefits of the altruistic deeds of that august body. It will, however, be doing no injustice and indulging in no unjustified cynicism and pessimism if the people of the East who have suffered in the past from the political and economic policies of European Powers, refuse to believe in or to grow enthusiastic over international conferences, leagues and covenants. India has supported and adopted, as a result of international deliberations, certain conventions, which, it is hoped, will make for the improvement of the world as a whole as well as for her own good. Indian economists have to make up their minds as to how their country will fare in this new order of things if and as it really comes into existence.

The difficulties of the conflict between economic nationalism and internationalism will be apparent from the anomalous position in which the big banking and industrial organizations of the world find themselves in the face of barriers interposed by tariffs and

other restrictions in the path of the smooth flow of the world's trade. The manifesto issued by the leading bankers of Europe and America some time ago and the holding of the Economic conference under the auspices of the League of Nations, throw instructive light upon this situation. The problem which Indian Economics has to face here is two-fold. There is, first, the question of external influences which act upon the indigenous organization and its working. And secondly, there is the internal evolution of economic institutions and activities. The two aspects may be distinguished but can not, in practice, be separated as they are closely interwoven and act and react on each other. The European economic system, which was paralysed by the War and which is now being rescued from chaos and ruin, has had a tremendous disturbing effect detrimental to the economic conditions in India among the countries of the East. That system has been characterized as "Economic Imperialism," and consists in European Powers extracting surplus wealth from abroad out of the exchange of their manufactures for the cheap raw materials and food produced by the new world and the orient, with the help of the means provided by scientific and organized strength and regardless of consequences to the victims of the exploitation[1]. Capitalism and imperialism have gone hand in hand in Europe and have combined to jeopardise and destroy the economic systems of Asia; and India has to consider, as Japan considered long ago, how she may defend hereslf in the struggle. Making the world a family and the nations, its members, is a great ideal in economic as well as in political advancement, and India will welcome it and will work to make it a reality. But stern and stubborn facts have to be faced; and no useful purpose is served by ignoring legitimate national consciousness and aspirations which may be controlled but can not be suppressed and also the imperialist ambitions entertained by western nations, democratic or otherwise. India is increasingly becoming conscious of her independent nationhood and

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1 "The results of the policy of economic imperialism pursued by this country (Great Britain) and other imperialist powers can hardly be viewed with satisfaction or equanimity. Politcal subjection, exploitation and economic slavery are never pleasant to their victims. Sixty years' experience of the blessings of European rule and civilization have resulted in Europeans being hated by their subjects from Timbuktu to Peking. And we are only at the beginning of the reaction against the cupidity and violence of western nations."—L. S. Woolf; "Economic Imperialism".

is a member of the British Empire and at least nominally of the League of Nations. It is this position of the country that makes Indian economic problems difficult and interesting.

9. Trend of Economic Thought:—It would be impossible to improve upon the masterly review taken by Ranade of the progress of economic science in the West, with the object of showing how the assumptions and theories of the older economists were utterly inapplicable to the peculiar conditions in India and how the later economic thought and the policy pursued by western countries in conformity with it, were more acceptable as better suited to the circumstances and the needs of India. The history of economic doctrines reveals the fact that the views of thinkers from the time of the Mercantilists down to the present day, have been perceptibly moulded by their surroundings, experiences and ideals; and the Mercantilist idea of foreign trade, the Physiocratic laws of nature, Ricardo's theory of rent, Malthusian doctrine of population, Carey's conception of rent, List's stages of economic development and the attitude of the Socialist and Historical schools—all illustrate the truth of this observation. Pure economics may lay claim to the precision of the physical sciences and communists may attempt a universal application of their peculiar theories; but the policies of modern parties and governments have been generally guided by practical considerations of varied and varying actual conditions of different communities. Both individualism and communistic doctrines indeed continue to be advocated in their extreme forms, but while the existence of economic laws is recognized by economists, their relative character is not lost sight of and due caution in their application to different conditions is advocated. Interdependence and co-operation are becoming factors of growing importance in the life of the peoples of the world, but the nation and the national state are still all-powerful units of humanity for purposes of economic as well as political existence and progress.

It must now be clear that the view-point of Indian Economics will be discriminating instead of dogmatic and national instead of cosmopolitan. Even in England, the home of orthodox economics, opinion has, in substance, now come round to the view of List that 'science must not deny the nature of special national circumstances nor ignore and misrepresent it, in order to promote cosmopolitan

objects'.[1] Professor Marshall has, for instance, aptly observed that 'though economic analysis and general reasoning are of wide application, we can not insist too urgently that every age and every country has its own problems, and that every change in social conditions is likely to require a new development of economic doctrines'.[2] State intervention in trade and industry, is on the increase in Great Britain; and the adoption of imperial preference in a limited form, the enactment of laws like the Safeguarding of Industries Act and the indirect and direct state assistance given to national industries are important illustrations. The Self-governing Dominions have ever been frankly national and imperial in their economic outlook. And the other nations of the world seldom professed and practised any other principle. Owing to a lack of knowledge and of interest, western scholars have rarely paid much attention to Indian conditions and problems; but coming to closer quarters, they have begun to feel that 'there is an urgent need that some one or some group of men should set about trying to create a distinctly Indian political economy.'[3] This work is calculated not only to do substantial benefit to India but to make a by no means inconsiderable contribution to the economic thought and literature of the world.

Any reader who wishes to go more deeply into this question of the social, the organic and the national aspect of Economics, will find sufficient stimulating food in the Appendix to this Chapter, entitled "Economics in India", which broadly reviews the recent trend of economic thought in the world and the position of Indian Economics in relation thereto. It will suffice if we make a few observations here in that connection. The view urged by Ranade that "modern thought is veering to the conclusion that the individual and his interests are not the centre round which the theory should revolve, that the true centre is the body politic of which that individual is a member, and that collective defence and well-being, social education and discipline, and duties and not merely the interests of men, must be taken into account if the theory is not to be merely utopian," is finding more favour with thinkers in all countries at the present time. But they are living in a strange paradise who think that

1 The National System of Political Economy.

2 Principles of Economics.

3 Prof. Lees Smith: "Studies in Indian Economics."

the battle is won and that little is left to us but to shout victory, under the impression that there is no more room for Ranade's lead and for his Indian Economics. Any decent book[1] giving an account of the recent developments in economic thought in different countries, will show that the struggle for the mastery still continues among the representatives of schools who are striving to revive and rehabilitate their own doctrines and methods. The dispute extends even to the aim, the scope and the purpose of Economics, and the most important theories are shaped according to different convictions. While the 'economic man' appears to have been thrown overboard, economic society is still considered by many, at least implicitly, as a collection of persons carrying on their activities in competition with one another for securing the maximum of happiness, without reference to the nation of which they are members and to the State and the laws by which they are governed. According to this view, Economics is not to pronounce an opinion as to what should and what should not be done and must content itself, as if it were a natural science, only with showing the sequence of cause and effect, consideration of national policies being taboo. Indian Economics, on the other hand, has to insist that economic society i. e. persons and groups of persons carrying on economic transactions, is only one aspect of an organized community having common interests, duties and obligations and held together as a State with its own personality.[2] This view has a vital bearing upon economic theories and policies such as labour legislation, immigration laws and tariff protection. It is thus not a matter of indifference to the Indian nation that the indigenous manufacturer suffers in competition with foreigners, on the ground that the most efficient wins in the race, whoever he is; because all Indians, workmen, consumers and manufacturers, stand or fall together.

Though it is true that Political Economy and Indian conditions have changed since Ranade wrote, the force of his teaching and inspiration has not exhausted itself, nor has his lead become superfluous. It is said that while he rendered invaluable services

1. Gide and Rist: *History of Economic Doctrines*; Hans Honegger; *Volkswirtschaftlische System der Gegenwart*; Tho Suranyi-Unger: *Die Entwicklung der Theorstischen Volkswirtschaftslchre*"; R. Stolzmann: *Die Krisis in der heutigen Nationalockonomie.*

2. See H. Pesch; *Lehrbuch* der *Nationalokonomie.*

in his time, Ranade was 'partly responsible for giving currency to the notion that Western economic theory was utterly useless for interpreting economic phenomena in India and indicating methods of economic progress', that he set the fashion in this matter which has continued much beyond its proper time and that what is now needed is comprehension more than dissent.[1] This criticism suffers from a misapprehension as well as from inaccuracy. Ranade set up as a proper guide, one western school of economic thought against another western school and never condemned all western thought, as such, and as pointed out above, we have to do the same thing over again to-day. He adopted a fashion set by a new school of thought in the west in his time, and it continues in active vogue there at the present moment as a protest against the atomic, mechanical and naturalistic conception of economic activities which is still favoured by serveral thinkers. Indian Economics has, therefore, its points of agreement as well as difference with the economic thought of the world as a whole, and its aim and instruments are selected to suit the requirements of the people of this country.

10. The Indian Problem:—There are at least five important factors in the problem that Indian Economics has to tackle: (1) natural conditions which man may be able to control or which are beyond his powers; (2) the ideals, the culture, the customs and the social institutions inherited by the people; (3) the external influences, particularly those coming from the west, which are actively at work in the country; (4) the state's attitude and policy; (5) the aspirations of the people as to their future. These factors do not work in isolation and separately, but act and react on one another, rendering the inquiry of the economic student complex in the highest degree. The difficulties of Indian Economics are, therefore, great and have to be patiently faced. The above factors will be seen to affect the production, exchange, distribution and consumption of wealth in different ways, and we shall indicate their operation in the proper places. It will suffice here to say that the vastness of the Indian continent, the diversity of physical and climatic conditions which prevail in its different parts, the variety of planes of intellectual and social progress on which the several Indian peoples stand and the heterogeneity of ideas, usages and institutions

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1 Jathar and Beri: *Indian Economics*.

which distinguish its numerous communities, constitute the immensely confused though inviting material on which the student has to work, and sweeping generalizations and theories about India as a whole are absolutely out of the question.

At the back of this diversity and over-shadowing it, there has always reposed a unity, however, which has not escaped the attention even of the stranger. And the influences which a close contact with the outside world and British rule have set at work are shaping the social and economic as well as the political destiny of the land in a disconcerting manner, and the drift of the development is barely discernible to the careful inquirer. It seems to be generally admitted that in this twentieth century no country in the world can expect to be left alone or escape being thrown into the vortex of modern material civilization ; and Asiatic nations can no longer be what they were in the last century. Peculiar religious scruples, the system of caste, intense communalism, absence of keen competition, immobility and a disposition to be content with things as they are, which predominate among sections of the Indian population, impart to India's problems of production, population, prices, wages, rents, profits, currency, banking, standard of living and so forth, a character of their own ; and it is the purpose of Indian Economics to unravel the tangle, to analyse the natural and social phenomena, to show their mutual relations, indicate the working of the economic forces and to construct a synthesis from the materials so arranged and examined.

II. Indian Ideals :—On what lines India should and will advance it is difficult definitely to state. In any case, she can not faithfully copy any model though Japan, an Asiatic country, appears to have imitated, with some success, the political and economic pattern of the west. The nations of Europe and America have passed through a series of stages, and India presents economic and social phenomena which have exhibited themselves at different times in occidental countries. The present industrial organization of Europe and America can not, besides, be said to be the ideal phase of their evolution which has been brought about by varied influences, material, moral and religious. It is neither final, nor by any means, perfect ; and social reconstruction is, to-day, a subject of animated controversy in western countries. The Bolshevic experiment which is being tried in Russia and the several schemes of

social reconstruction that are being discussed in almost all countries, show what uncertainty exists in the world at the present moment. India will find many a valuable lesson in contemporary history for her guidance. The evils associated with western industrialism are evident to her people, and though they are drifting into it, warnings and searchings of the heart are only too common. While, however, we are warned against western evils, the indigenous variety of these, is no less patent and troublesome.

Three classes of thinkers may be discerned in India: (1) the conservatives and revivalists; (2) the reformists and liberals; and (3) the radicals. People of the first class hold that India should try to preserve her distinctive civilization and to maintain her old economic organization, her peculiar social and industrial institutions and her traditional methods of production and consumption. They would resist the introduction, into this country, of the modern industrial system under which even the West does not feel happy, and wherever possible, would maintain and revive the old customs, practices and institutions. The second class of thinkers recognize that western civilization is not an unmixed good, but feel that it has a positively bright side. They are not out to destroy the many admittedly excellent features of indigenous culture; they are, however, anxious to introduce the principles of individual liberty, equality and fraternity wherever it is practicable. Adaptation and assimilation are, in their view, both desirable and practicable and they wish that the East and the West should learn from each other. The radicals go much further and have no doubt about the beneficence and feasibility of the adoption of revolutionary changes in the social organization and would not hesitate to welcome and work for communism, for instance. The middle course, we feel assured, will appeal to most thoughtful people.

The unifying effect of British rule, the peace and organized government which prevail in the country, the western education which the people are receiving, the close contact into which this ancient land has been brought with the most distant parts of the world owing to rapid means of communication and the hopes and the aspirations which have been roused in the public mind about India's destiny, by happenings within and beyond her borders and particularly by the great war which has set afloat new conceptions of national and international life that are taking a hold of the mind

of the East—all these are factors whose influence on the development of India has been and will be profound. The whole economic order has been violently disturbed, and the social institutions, the religious beliefs and the centuries-old customs and traditions of the Indian people, have been and are being deeply affected by powerful influences, the result of which is a hybrid culture, a curious mixture of old and new, Eastern and Western. Indian economic phenomena are already most bewildering, and while it is not easy to say whither things are moving, it is the duty of the statesman to make the most of the materials in his hands. The work of the economist lies in disentangling the confusing mass of facts and tendencies with which he has to deal so as clearly to visualize the whole position and in applying to them the laws of his science in such a way as to suggest the lines along which progress should be beneficially directed.

12. Theory and Practice:—It is here that the economic laws deduced by the exponents of economic science in the West and based upon their own limited observations and experiences, go hopelessly wrong if they are applied, as they were once rigidly applied even in England, without the necessary qualification. But to our mind, the fault does not lie so much with the economic doctrines as with the manner in which they are brought into requisition. It is indeed dangerous to import into economic discussions in India, assumptions and conclusions which are true of conditions in England or America. It is equally dangerous, however, to presume that the people in India, as it were, belong to another planet and have little in common with humanity in other parts of the world, and particularly its civilised parts.

Care must, therefore, be taken not to dogmatise or generalize too much from a few or isolated cases and conditions existing in limited spheres. The practical and the ideal should likewise be clearly distinguished and the static and the dynamic states should not be confused with each other. Errors in this regard are responsible for faulty reasoning and wrong conclusions. A few illustrations will make the point clear. The unchanging East is now being proved to be a myth and it has already betrayed considerable capacity for adjustment to altered conditions. The question 'How can a people who lay greater store by the other world than this, aspire to attain material development?' is being answered by the

growing national keenness for the growth of industries and trade in India. Indian labour is no longer an inert mass and is showing signs of a vigorous life. The deliberate adoption of the policy of the state management as well as the state ownership of railways is now an accomplished fact, though at one time it was believed to be uneconomic. The theory of the beneficence of growing foreign trade was supposed to hold good in India though it yielded profit to a few individuals and brought ruin to many; and now discriminating protection is the avowed policy of the State. The State has created the right of property in land and conferred it on zamindars in certain parts of India while in others it has reduced the proprietors to the status of tenants. It is also stated that nationalization of land which is only a distant ideal in the West, is a reality in this country[1]. Land revenue is supposed to be rent and not a tax. The presence and the absence of the motive of self-interest is indifferently assumed and conclusions are drawn to harmonise with the hypothesis. Tenants and small peasants are protected by legislation, but no vigorous effort is made by the State to facilitate the starting of new industries. The need of a true gold standard for India has been alternately admitted and denied and the special conditions in India in this respect have been clearly recognized only recently. Instances may be indefinitely multiplied and many of these will claim our attention as we proceed.

The requirements of the economic situation are not, however, a matter of doubt or dispute. It is generally agreed that the growing population of India must be decently housed, fed and clothed and the common standard of life must be raised. The national dividend must increase and its distribution must be improved so that a much larger share of wealth may fall to the lot of each person enabling him thereby to live a better and happier life. The present condition in this respect is, by common consent, not satisfactory, and the problem can be effectively solved only by a fruitful economic study and an earnest endeavour to apply the remedies suggested by it. The work of the economist is one of great responsibility and requires faith, enthusiasm and industry. How many people in India are aware that there is a science of economics and that phenomena of industry, trade, wages, prices and poverty can be under-

stood only by observation, study and training? Many believe that they know the nature of social ailments and their specifics when, as a matter of fact, they have not even a glimmering of the essence of those problems. Nothing appears easier, for instance, than an explanation of the phenomenon of high prices. If food is dear, the fact is put down exclusively to the export of cereals and the dearness of milk is attributed solely to the slaughter of cattle. There is so much ignorance abroad that any theory passes muster, while as a matter of fact, the complexity of problems is so great that none but a well-informed and trained mind can usefully deal with them. Such a state of affairs prevails even in the West, and things are, of course, much worse in India.

The task of the economist is not less responsible and invidious in India than in other countries. His conclusions will run counter to the accepted policy of the State in certain respects; and in others, they will come in conflict with the pre-conceived notions of the people. The Indian economist has to disentangle complex facts and correctly to interpret them, pointing his finger to the right path of progress to the State and to the community, and in doing so, he has to expose himself to the charge of being an impatient idealist, an arm-chair critic, an unpractical, inexperienced and irresponsible opponent or an irreverent, unpatriotic, radical reformer and westernised materialist. He will, of course, have to take into account Indian ideals and ways of thought and action and decide how far they may be beneficially retained or suitably modified. He may have to say things which will prove unpalatable both to the Government and to the people as they refer to the policy and measures of the State and the beliefs and social customs to which different classes of the population are wedded. No difficulty, whatever its nature, ought, however, to deter the economic student from his indispensable though apparently thankless task.

13. Some Practical Questions :—As concrete instances, we may mention some of the practical questions which confront the student :—Do the peculiar religious beliefs and social usages of India preclude the possibility of speedy progress in the economic uplift of the people? Is it possible for India to stick to her own supposed peculiar ideals? How are these influenced by the cultures of other nations? What is purely Indian civilization? Can

it be maintained in the face of the inroads of alien civilizations? Can it be adjusted to changing conditions in and outside the country? Should Indian industrial development run along Western lines? Can India be a manufacturing country? Or must it continue to be predominantly agricultural? Is it practicable and desirable to maintain and encourage the old indigenous industries and can cottage industries be expected to compete with foreign or local manufactures organised on a large scale? What steps should be taken to improve agriculture and make it more productive? What economic effects are produced by the existing distribution of landed property? How should the relations between landlords and tenants be regulated without injustice to either party? How do social institutions like caste, affect the economic progress of the people? What changes in the ideals and ideas of the people and in the political and social institutions of the country are needed to promote rapid advancement? Is the existing educational system of the country calculated to assist in the improvement? If not, how can it be improved? Is the present land revenue system in need of reform? How can more money be raised from the people by the State through taxation and otherwise without prejudicially affecting their standard of living and how may it be spent to their undoubted benefit? Is the present incidence of taxation equitable? What should be India's fiscal policy and what should be her relations with the other parts of the British Empire and with foreign nations? How can sufficient capital be found for large-scale industries? Should the use of foreign capital be restricted or regulated? What should be the exchange and currency system of India and how should banking be developed in the country? What is the condition of agricultural and factory labour and how may it be improved? Is the growth of trade unionism inevitable and desirable? Is socialism in any of its forms inevitable or desirable? What should be the relations of national, provincial and local finance? Should the State manage its own railways? What is the relation between housing and sanitation, urban and rural, and the well-being and efficiency of people? How may individual and public charity be directed into more useful channels and mendicancy be discouraged? How can the lower classes in the community be uplifted and their capacity to produce and consume be increased? How can a policy of protection be reconciled with the interests of consumers?

These and other questions of this character assail the Indian economist and demand a solution at his hands. And well may he be weighed down with a sense of responsibility that is thrown upon his shoulders. Economic inquiry ought not to be merely an intellectual pastime to him. Nor must economic discussion be merely a warfare of words. His work is not intended merely to furnish political combatants with facile and ready-made weapons, though it is his duty to warn, advise and guide government and people. It is the business of Economic science, as some writers have put it, to state what is and not what ought to be. But national Economics goes further and provides guidance for the framing of policies. The influence of economic investigation and of the conclusions to which it may point, must be brought to bear upon the life of the community and the actions of the State. In this lies the peculiar importance of the work of the economist. It is in a spirit of profound devotion to science and untiring search after truth inspired by a humanitarian and patriotic desire to contribute to the betterment of the people that Indian Economics must be conceived and the Indian economist must work. And the value of economic studies can not be too much emphasized in the midst of the conditions which prevail at present in this country.

14. Conclusion:—To the question what is the purpose and scope of 'Indian Economics', the answer may, in conclusion, be briefly given that it has to examine the material and moral condition of the people of India from the point of view of economic science and to suggest safeguards and reforms that will ensure to them a reasonable amount of well-being while they live and work under powerful external and internal influences, acting upon one another.[1] The clash of eastern culture and western civilization is a matter of history and of living experience ; and the former has, therefore, to be preserved, protected and moulded to suit new conditions. Discontent, which is welcome if it can be directed into proper channels, is rife in India. Every class is dissatisfied for one reason or another with its present

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1 Compare the follwing definition:—"The term political economy is an empty phrase; it signifies nothing in modern practice. On the other hand, National Economics is a science which constitutes the basis of Nationality, is designed to control all the laws and regulations relating to education, chemistry, production, transportation and banking, out of which wealth is created and it makes all dead value remunerative."—J. T. Peddie ; 'A National System of Economics.'

state. The capitalist, the workman, the landlord, the tenant, the middle class, the consumer, all share in the discontent. There would be nothing serious in this if it were a passing phase. But it persists. To mention one symptom of the trouble: the Indian workman is represented at the international Labour Conference; but even in the British Empire, he is not admitted to a position of civic, political and social equality. He is wanted in the Dominions and the Colonies to toil as a cooly, but his low standard of living and inferior civilization as also the racial competition which he sets up, are declared to be grounds sufficient to justify isolation, exclusion and restriction in the case of this Indian citizen of the British Empire. While the Indian is thus treated abroad, in his own country, he suffers from injustice and is far from being able to understand, regulate or control the industrial evolution that is going forward. Economic imperialism appears still to be in full swing. Imperialists want that India should be made to help in the rehabilitation and the strengthening of British industries regardless of any effects on her own, and Lancashire would like to dictate the fiscal policy of India in British interests. Efforts are made to secure the Indian market exclusively for the products of British industry. On the one hand, adherents of the older school of economic thought see nothing but benefit accruing to India from unrestricted competition, flourishing foreign trade, cheapness and abundance of imported machine-made goods and the decay of indigenous industries. On the other hand, economic imperialism wishes to control and regulate the development of India in the interests of the Empire which means chiefly the interests of Great Britain. The practical effect of both the policies on the country is the same and there is a powerful reaction in India against them.

The helplessness which is felt in the face of the international and internal struggle described above, is driving some people to wage a desparate crusade against modern civilization and to preach, as a measure of defence and by way of protest, a return to the indigenous methods of industry and the restoration of the old culture and mode of life. They find that the introduction of western civilization in their midst has resulted in cultural deterioration, social chaos and economic dependence. They see in cheap foreign luxuries and social amenities that are being made available to the

mass of the people, only a thin, glittering film of progress which hides below it, poverty, wretchedness and degeneration; and they are anxious to warn their countrymen off the slippery path of modern civilization. This view can not be summarily and unceremoniously dismissed as the outcome of pessimism, ignorance, impatience or perversity. The system of the exchange of India's raw materials and food stuffs for foreign manufactures and services, which has resulted in profit to the foreigner, has not conferred an equal benefit upon this country, and India has had to suffer from disorganization worse than what Europe has undergone since the close of the War. The economic relation of India with the outside world has been altogether changed in the last century as also the mutual relations of classes in the country itself, with respect to the production, exchange, distribution and consumption of wealth; and there is great danger of the incidental advantages of the position being exaggerated and of the detriment being minimised. The growing sentiment of nationalism in India has to contend with a similar feeling abroad, combined with increasing internationalism in the organization of industry, banking and trade. This is the hard struggle into which India has been thrown and her difficulties are extremely baffling. The question is thus often asked: Is India growing poorer or richer? And the answer given is according to one's preconceived notions. The standards by which to judge these matters themselves vary, and great care is required in their application.

The situation has its bright as well as dark patches, of course; and the prospect is not devoid of redeeming features. The steadily growing share the people are receiving in moulding national destinies, is providing them with the opportunities and the means necessary to bring about social and economic improvement, and trained thinkers are beginning to secure a chance to make their influence felt. Interest in economic investigation is being created and its value for government measures is coming to be recognised. Beneficent economic policies are being recommended and their effective carrying out repeatedly urged. The social phenomena which Indian Economics has to handle, are not so simple as some people seem to believe; and the student must keep his gaze steadily fixed upon the goal of his work in investigating and examining facts and tendencies, viz. to deduce conclusions

and offer advice based thereon with a view to assist in the material and moral improvement of the people. He must expose fallacies and dissipate ignorance and prejudice; and show how the nation's resources may be more effectively used, the means at its disposal may be made most of and improvement in various directions may be brought about. Passion, over-wrought sentiment and factious zeal will vitiate economic deductions; and though economists may differ from one another in their diagnosis and prescription of remedies, their laborious exertions and honest conclusions will have immense value for the promotion of national well-being.

Select References.

Gide and Rist: *A History of Economic Doctrines*; List: *The National System of Political Economy*; John S. Hecht: *The Real Wealth of Nations*; Ranade: *Essays in Indian Economics*; Peddie: *A National System of Economics*; Theodore Morison: *Economic Transition in India*; Lees Smith: *Studies in Indian Economics*; Rabindra Nath Tagore: *Nationalism*; D. A. Shah: *The Indian Viewpoint in Economics*.

APPENDIX

ECONOMICS IN INDIA.

[From the Presidential Address delivered by the Author at the twelfth session of the Indian Economic Conference at Mysore, on 3rd January, 1920.]

The history of economic thought in other countries suggests that when there is an intellectual upheaval and excitement and provocation of surrounding social and political conditions and when there are urgent national problems to solve, thinking minds are driven to apply themselves to the discussion of economic questions and to impart their ideas to others. Prof. Seligman tells us[1] how this was true of the rise of schools of economic thought both in the United States of America and in Germany. He says:—" Just as the economic problems of the new German Empire on the close of the Franco-German war gave a prodigious impulse to the development of economic science in Germany, so was a like movement accomplished in the seventies of the last century in the U. S. A." It is worth noting that there was no adequate provision for economic teaching in the States in those days and that England and France were no better in that respect. American students, therefore, resorted to German Universities and studied at the feet of Knies at Heidelburg, of Roscher at Leipzig and of Held, Wagner and Schmoller at Berlin. On their return to the States, these young men were appointed to the chairs of Economics which were created for them at the leading American Universities. The seed thus sown in a fertile soil has grown into a wonderful crop of researchers and scholars who are liberally encouraged and patronised in that wonderfully wealthy country. Every thing in that fortunate land is on a large scale; and the study and teaching of Economics is not an exception to the general rule. Provision for the teaching of Economics is made there not only in the Universities and colleges but in the higher classes in the high schools. In the Columbia University there are between forty and fifty teachers of Economics. The interest taken by the educated American public in economic science is so deep that the American Economic Association has over three thousand members, and the membership of the Academy of Political Science runs to between six and eight thousand. These

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1 "Festgabe fur Lujo Brentano: Die Wirtschaftswissenschaft nach dem Kriege."

figures alone should make us pause and think. Millionaires like Carnegie and Rockfeller have founded chairs and institutes for the work of economic research and study.

The state of things in France has been different and we, in this poor and backward country, may draw what comfort and moral we can out of it. The venerable French savant, Charles Gide, graphically describes[2] how Political Economy in his country has, on the whole, remained loyal to the tradition of the Classical school, how the orthodoxy was maintained intact, for years, under the rigid control of the narrow and exclusive Institute or "Academy of moral and economic sciences", how till the year 1878 there was no provision for the teaching of Economics in any University in France, the work being done at independent Collegiate institutions, how after that, Economics came to be yoked with Jurisprudence in one faculty and how it was feared that this admission of the science into the sanctum of the University would open the door wide to heretical dogmas from Germany. Till the beginning of this century the instruction in Economics imparted in the colleges or collegiate high schools was ill-calculated to stimulate a genuine love for the science or the development of economic thought. As in India, the professors had to prepare the students for examinations and had to go through a course prescribed by the government. It is during the last twentyfive years that the basis of instruction has been widened and the professors have obtained freedom owing to the introduction of the doctorate. Even now the average French student cares to attend only the obligatory lectures useful for his examination and gives the go-by to the others, the 'free' ones. Gide humourously relates how some foreign students, who went to attend his lectures and feared they would find no room in his class, were surprised to see that there were hardly fifteen pupils attending! The French student chooses his professor only with an eye to his examination, and a professor, however renowned for his learning, can not attract pupils by his attainments or scholarship. His moderate income is independent of his fame and the number of his students. In spite of these unfavourable conditions, Gide maintains, the literary output of French economists is by no means small, and can compare favourably with the outturn of other countries. Pure economics is, in France, an unproductive branch, but questions of social reform and of economic policy are actively and widely discussed. In fact, this is a striking characteristic of the country.

Until very recently, Indian professors were expected only to cater for the needs of undergraduates preparing for the degree examination, the level of teaching and study was very low and the facilities at the colleges were extremely poor, the Universities contenting themselves with prescribing the

2 "Festgabe fur Lujo Brentano: Die Wirtshaftwissenschaft nach dem Kriege."

courses of instruction and examining candidates. Outside the colleges and the Universities, the impulse to the investigation and discussion of economic problems came from the political and social conditions as they steadily developed in the country. Chronic poverty and recurrent famines, the *laissez faire* and *laisser passer* attitude of the state, the land revenue and currency policies of government, the growing indebtedness of the peasantry, over-centralization of administration, famished provincial finance, cotton import and excise duties, the salt tax, the decay of indigenous industries—were matters which chiefly attracted public attention and evoked discussion, and Dadabhai Naoroji, Ranade, Romesh Dutt and Gokhale became exponents of independent economic thought in all such directions. Pure Economics found no devotees, and economic history and economic policies absorbed the attention of such few students as the unfavourable conditions in the country produced. This tendency also finds a parallel in the development of economic studies in France.[3] Apart from political organizations which made it their business to mould public opinion on economic problems, there were neither associations nor journals which devoted themselves to the study of economic theory, the investigation of economic conditions and the suggestion of government policies. In the absence of initiative and power of any kind to mould things, mental depression and intellectual lethargy reigned supreme. This state of things persisted for years, and little was done either by the Universities or by enlightened public opinion to improve it. Indian economists and publicists found no place on the committees and commissions which were appointed from time to time to enquire into various questions of economic and general public interest. They were thus deprived of the opportunities to handle such problems from the theoretical and the practical points of view; and government and the nation lost the benefit of the touch with the realities of Indian life and sentiment which they were best calculated to supply. The atmosphere within the Universities and outside was, in this way, not very congenial to the outburst of economic speculation or to the formulation of plans of economic and social reform, though the little that was achieved in the unfavourable conditions, left no doubt as to the latent possibilities of the nation in those respects. It is needless to refer to such work e. g. of Ranade, Dutt, Joshi.[4]

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3 "The French have little taste for pure, abstract economic thought and such as were, in the beginning, inclined that way, soon abandoned the course and turned to questions of social and economic policy; Cournot and Walras have founded no school. To cite my personal example, I was bound to Walras by ties of intimate friendship and he hoped to secure in me a pupil, but circumstances have driven me to associate myself with the cooperative movement which has, in course of time, completely absorbed me."—Gide in "Festgabe fur Lujo Brentano."

4 **Ranade: Essays in Indian Economics; Dutt: India under early British Rule and India in the Victorian Age; Joshi: Writings and Speeches.**

But let me hope that we are leaving this depressing past behind, that a new era has now dawned and that the future for the cultivation of the science and the practice of Economics is more encouraging. It is a welcome sign of the times that our newer Universities have provided for post-graduate teaching and research in Economics as one of their regular functions, and University professors have been appointed to guide and control the work. The undergraduate teaching too is being made more efficient and practical. The older Universities have also begun to appreciate the importance of affording to young men opportunities for higher studies in the social sciences and training in the application of their laws to problems of national life. Few will, however, be found to doubt the inadequacy of the arrangements which most of our Universities have been able to make in this connection, and it will be readily admitted that the influence of the University and college professors has scarcely yet begun to tell on the minds and the lives of the student world and the public. Some of the Universities still continue in the old rut; and students are able to obtain the highest degree in Economics by cramming a few books. The awakening is, however, there; and the Universities, the governments and the public will have to make every earnest effort to promote this movement so essential to the best interests of the progress of the country. Secondly, we have now as University professors men who have undergone training at foreign Universities and are qualified to impart to their pupils the spirit of search for truth, of industry in collecting and marshalling facts and statistics and of scientific accuracy and integrity in interpreting them and drawing conclusions from them. The thirst for knowledge, the habit of investigation and the *penchant* for discussion, which were so characteristic of the world of learning in India in olden times, must be revived, and there could be no better means of achieving this end than the introduction of the western spirit of work in our Universities.

It is again a welcome sign of the times that, to judge from the appointment of economic experts on the Fiscal Commission and the Royal Commissions on Indian Currency and Agriculture, as also on the Boards of enquiry into the application of industries for protection, that government has given up its old policy of exclusion. Experience of war-time and of the post-war period of reconstruction, has fully demonstrated the value of the co-operation of trained economists in solving economic problems of national and international interest. It is to be hoped that the assistance of economists will be sought in the future in an increasing measure in India to the benefit of the government and the people of the country. At the Bombay session of this Conference ten years ago, I ventured, in the course of a paper, to suggest that an economist should be regularly associated with the revenue officer periodically deputed to make proposals regarding the revised settlement of land revenue so that the problem could be thoroughly and scientifically dealt with. The suggestion did not then appeal to many, but certainly the serious troubles we have had recently relating to rents and revenue were not needed

to show the importance of a comprehensive, thorough-going and systematic investigation of a question which affects the lives of large numbers of cultivators. Economists have a part to play in such matters which can not be allowed to be exclusively dealt with by revenue and judicials officials. It is to be hoped that the business community too is beginning to realize that a knowledge of economic theory is not superfluous to the successful working of industries and trade. Recent discussion of the policy of government in relation to currency and exchange and the claims of certain indigenous industrial enterprises to state encouragement and assistance, as also the prevailing labour unrest, ought to make this clear if it has not already dawned on the minds of our capitalists. Nor can our press and politicians afford to ignore the teachings of economic science with respect to the ideals they preach and the measures they propose for adoption by the nation. There are indications that in this regard too a correct appreciation of the issues involved is slowly but surely penetrating the quarters concerned.

No better index of the new economic awakening that is coming over the country can be found than the commendable efforts which are being made in the different Provinces to collect facts relating to rural and urban life. Middle class family budgets, the standard of living and the wages of the working classes, the different aspects of the agricultural economy, the co-operative movement, are some of the subjects which are likewise engaging the attention of several, among whom government officials are seen to take a welcome part. The papers which are read before our Conference are a significant testimony to the highly systematic and useful nature of the tasks undertaken in this respect by the members of our Association. Here too is essential a close co-operation of the Universities, the governments, the professors and the public if substantial results are to be achieved. I may be permitted, without being impertinent, to pay a tribute to the high level of the scientific and practical work that is being turned out by our economists, whether they are members of our Association or not. A good deal of the outturn is indeed creditable and shows that we are treading the path of professors at the western Universities. During the past few years, every part of the field has been taken up for exploration, and economic history, economic theory and practical economics have been ably handled. I shall not mention the names of the authors as you are all familiar with them. What is now needed is the application both of the extensive and the intensive methods to the work. Research associations and study societies have been started in a few centres, and this activity requires to be spread and strengthened. Our own Journal is admittedly capable of improvement, and our membership must considerably increase. With our limited opportunities and resources, we, who are teachers of Economics and others who are otherwise interested in the subject, must do all we can to rouse general enthusiasm for the science, make people appreciate the value of its teaching for the progress of our country and enlist the sympathy and support of government and public alike for the cause we have espoused. There is infinite

scope for our labours and it will be a number of years of strenuous effort before we can say that we have achieved something appreciable. Wherever one turns, one comes up with an economic problem—why, India's immediate national future itself is one such big problem. We have to strive in the profound faith that we can usefully contribute to its solution. We must make our voice heard and must train the coming generation in the scientific ways of thought. The optimistic note traceable in the above remarks is obviously based not so much on what we are and what we have accomplished as upon what, given the will and the requisite opportunities, we are capable of achieving. It is more the promise than the performance which fills me with hope. The teachers have themselves to set an example of hard, patient and earnest work which others may be expected to copy. There are arrears to be cleared up and a fresh account has to be opened.

Now, what will be the aim, the principle and the method that we may beneficially follow in our scientific activity? The answer is fortunately available in the rich literary legacy which thinkers in the west have left to us. There is indeed a clash of opinion and a conflict of attitude which is often perplexing and annoying; and it is a notorious reproach against the economists, that of all scientists they are the people who will not agree on any thing not even on the fundamentals of their discipline.[5] While there is some truth in this charge a careful study and reflection will show that things are not as bad as they are painted[6] and that a clear path is visible in the overgrown jungle of controversy. Even the natural sciences are not free from academic disputes and theoretical vicissitudes, and in a social science like Economics, I am inclined to regard differences of viewpoint and method as a sign of strength rather than of weakness. We, of this generation, are fortunate in being able to survey with admiration, interest and instruction the grim battles which the old schools of thought fought with one another and the successive triumphs and defeats the combatants won and sustained on the theoretical, methodological and political grounds. The echoes of these fights are certainly audible even to-day, and skirmishes may be seen still going on between the adherents and campfollowers of the old leaders. The economist of to-day can, however, obtain a better perspective of things and can realize how each school and system has made its own contribution to the building up of the structure of

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5 S. Helander: "Die Ausgangpunkte der Wirtschaftswissesschaft."

6 "It is often made a reproach against our theory that it is raw and incomplete because there is serious contradiction with respect to its fundamental principle. *One who studies the theory carefully will not accept this judgment* without reserve. An inquiry into individual problems of theoretical economics will show that while controversial points are not wanting, the new solutions, in spite of their divergence, tend to run in similar directions and that the gulf between the old and the new theory is not so difficult to bridge as is often supposed."—Wolfgang Heller: "Die Entwicklung der Grundprobleme der volkswritschaftlichen Theorie."

economic science as we have it to-day. Thinkers are not wanting even now who will attempt a reconstruction of the science from the foundations to the top, on some novel principle[7]; but the general tendency is for the leading economists to reconcile the differences and to arrive at a common understanding with regard to essentialls.[8] Dr. Marshall's influence, for instance, has been exerted in this direction. The battles on the score of ideals and methods have been fought mainly on the German soil, and every few years, an author[9] has come out deploring and describing a crisis in the prevalent state of ideas about Political Economy.

The battles of the economists raged chiefly round the following questions: What is the distinguishing principle of Economics as a science? Can it become an exact science in the sense in which the natural sciences are exact and are economic laws natural laws in the same sense? Has the science a goal of its own and can it pass judgments as to what ought to be and what ought not to be in accordance with its particular notion of 'values'? What is the relation of Economics and social and political policy? Is the economist, as a scientist, competent to give advice as to the suitability or otherwise of measures of reform? Is the keynote of Economics individualistic or organic and social? Is the acquisition of knowledge and the formulation of theory in a certain sphere of life to be the only purpose of the science or is it calculated to be a guide for action as well? The classical economists who rondered the inestimable service of founding our science, were driven to use the method of abstraction rather too much in their anxiety to discover 'natural laws'; and their conception of economic society became mechanical and individualistic. The 'economic man' was the horrid product of this procedure and idea; and in their scheme there was no room for any motive or principle other than enlightened individual self-interest or for state policy, patronage and interference. A theory, when it is first formulated, appears to conform to the conditions with which the author is familiar and to his own ideals and philosophy of life. So was it with the orthodox school; but it was soon discovered that their theories did not square with the social conditions as they developed in England itself, and the good of the community which was expected to result from individual liberty in exchange activities did not appear to materialize in the case of the large mass of the people.

The reaction against this atomic individualism was started by the Romantic school led by Adam Muller, who pitted against it the conception of universalism. According to this school, economic life, which is only a part of social life as a whole, can not be dealt with in isolation without detri-

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7 For instance, R. Liefman and Cassel.

8 Dietzel: "Theoretische Sozialokomik."

9 Pohle: "Die gegenwartige krisis," 1911; and Stolzmann: "Der Krisis der heutigen Nationalokonomie," 1925.

ment to the community. They went hammer and tongs at the capitalism, the competition and the hankering for gain which characterized the thoughts of the classical school. "National existence itself in its totality is the true wealth of a nation", "Each individual productive power can produce only when it is itself produced by a higher productive power. If the state ceases to produce, then cease all the smaller productive powers with it". "When it is said that a thing has value, what is meant is that it has value in relation to the whole community". These statements are typical of the propositions laid down by Muller. List's special contribution was the introduction of the idea of nationality and relativity and his substitution of the theory of productive power for that of exchange value[10]. The most deadly attack on the Classical school, however, came from the Historical school which condemned the former's abstract method of reasoning and its theories which appeared to be so far removed from reality. The younger historical school which succeeded the elder, while sharing the views of the latter to the full, emphasised the necessity of state interference and measures of social reform, and thus earned the nickname of "socialists of the chair". A particular philosophy of life—German Idealism, was again largely responsible for these conceptions of universalism and solidarity.

The victory of the historical school was, however, shortlived and did not go unchallenged. The Socialists had, in the meanwhile, butted in. They adopted and refined the classical theories' and used them as weapons to fight the capitalistic system. Fired with the zeal of historical materialism, the socialists envisaged a future in which capitalism would be crushed under its own weight of industrial concentration, and private property would be done away with by the working classes who, suffering from low wages and poverty, would capture the whole social machine and triumphantly establish the rule of the proletariat. Their theories relating to surplus value, concentration of industry, the reserve army of labour and the final collapse of the whole industrial organisation did not pass muster with scientific and critical minds and failed to accord with facts—just what had happened to the classical school. The chief weakness of the opponents of the founders of political economy lay in the fact that while they had pulled down the old imposing superstructure of economic theory, they had supplied nothing as a substitute for it. While there was a good deal of idealism, a wealth of analysis and description of social institutions and a comprehensive programme of social reform, there was no theory and therefore no science. What was urgently needed, to evolve order out of the prevailing chaos, was the revival of economic theory and the reconstruction of the science. This task was essayed by the Mathematical school, and particularly by the Austrian school, led by Karl Menger. Jevons and Walras made similar attempts independently in their own coun-

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10 Artur Sommer: "Friedrich Lists System der Politischen Okonomie."

tries. The new movement spread fast and wide and secured adherents almost everywhere, though outside a narrow circle, it found no foothold in Germany. The goal which the classical economists had only partially succeeded in attaining, was effectively reached by the new school of thought, though by quite another path. The bridge connecting men and markets, put up by the former, constisted of flimsy stuff such as value in exchange, self-interest and the cost of production; Menger constructed it out of stronger and more durable material extracted from the quarry of the human mind viz. utility, wants and their statisfaction.

Though the revival of theory and the reconstruction of the science were welcomed on all sides, economists did not build on a uniform pattern. The old feuds had not, besides, completely ceased, and the discomfited fighters repaired their wounds, polished their armours and sharpened their weapons, ready for the fray again. The last twenty-five years have, nevertheless, been a period of reconciliation, coordination and understanding, and it is important to consider in what respects substantial advance has been made by economic science during this period and what solid ground has been covered by economic thought. It was at one time believed and stated that the war-time experiences and mentality would shatter Economic science to pieces and that it would then be necessary to construct the whole thing anew in the light of the happenings of the dreadful calamity. Nothing of the kind has come to pass, and the science stands foursquare to all the winds that blow. The war indeed furnished to the economist those experiments which are not normally available in the human social laboratory and taught him many a lesson regarding the necessity of establishing a close touch between economic theory and economic politics. Extensive state control, embargoes and rationing, the breakdown of monetary standards, inflation and deflation, enormous public debts, burdensome taxation, trade boom and depression, labour troubles, cartels and trusts, widespread and distressing unemployment and government doles, state subsidies to and protection of national industries—these and other such phenomena and measures which characterised the time of war and the post-war period, have served to illustrate the working of economic laws and have also armed the different schools of economic thought with arguments in support of their favourite theories and against their pet aversions. It is significant that even before the war, the necessity of reconsidering and reshaping their own traditional systems was keenly felt by the adherents of the economic schools, and this represented an attempt to reconcile theory to reality. We thus meet with so many "Neos"—Neo-Liberalism, Neo-Mercantilism, Neo-Romanticism and Neo-Socialism[11]. Economic Liberalism is the lineal descendant of the Classical system and the reconstruction of theory attempted by its representatives, among whom Cassel may be prominently mentioned, has not improved

11 Hans Honegger: "Volkswirtschaftliche systeme der Gegenwart."

its reputation[12]. Its theory still remains individualistic, unconcerned with the actual social conditions, and moves in the grooves of mechanical and natural law. But the fundamental ideas of Liberalism appear to have been shaken even in England, its original home and stronghold. From an exhaustive study of Liberalism and Protectionism in English economic policy since the war, Dr. Leubuscher,[13] draws the following three conclusions :—The individualistic constitution of English industry, particularly manufactures, and also banks, has been increasingly replaced by an organized and centralized structure which allows no free play to competition, the pride of English economy of old, and secures a safe control of markets. Another tendency which threatens Liberal principles is the increasing importance which is being attached to the producing classes to the neglect of consumers whose interests were paramount before, which means the weakening of the insistence on a free trade policy. Thirdly, the same result flows from the claim of different groups of consumers to the maintenance of the standard of living already reached by them. The Liberal principle of individual freedom is generally admitted to be sound at bottom, and what is objected to is the exaggerated Liberal idea of its efficacy almost as a universal rule of policy. It has, therefore, already had to make important concessions to the principle of solidarity. Social politics is now held to be compatible with Liberal theory within large limits. It is said that the aim and the means of 'sozialpolitik' must be distinguished. The aim is always the same viz. the maintenance of the community in health and power, guarding it against the opposition of its parts, particularly for the protection of the weaker classes such as the industrial workers.[14] And even a theory of social politics has now been formulated.

A convincing proof of the process of theoretical adjustment and reconciliation is provided by the efforts of the supporters of the marginal utility theory—described by its opponents as a mere play with words, and deprecated as subjective, individualisitc and mechanical—to fit it into the organic conception of society. Wieser[15] recognizes the necessity of making economic theory coextensive with social theory as exchange activities or economic life can not be properly considered apart from general social relations of classes and groups towards one another. American economists like Clark and Seligman, who have adopted the marginal utility theory of value and used it to explain the laws of distribution, have systematically rid that theory of its narrow, individualistic import. Seligman, for instance, speaks of

12 Gustav Cassel: "Theoretische Sozialokonomie."

13 " Liebralismus and Protectionismus in der englischen Wirtschafts politic seit dem Kriege."

14 See articles on Liberalism in the "Festgabefur Lujo Brentano", 1925.

15 F. V. Wieser: "Theorie der gesselschaftlichen Wirtschaft" in "Grundriss der Sozialokonomik", I part II.

social marginal utility and social marginal cost. He puts man and not wealth in the forefront of his studies, and contends that in the freedom of competition and in the production of wealth not the mechanical and individual, but the social point of view must be emphasised. He also holds that the conclusions of Ethics and Economics can not long remain in conflict as both have to deal with man as a member of organized society. The idea that individual economic activity can not be conceived independently of its organic relation to other activities and to the whole community, receives fruitful development in the hands of the Neo-Romantic school, and the best exponent of this movement is Othmar Spann of Vienna.[16] According to him, the individual is a 'social individual,' impenetrated in all his activities by his social character. Economic life is only a means to the larger social life, and yet is influenced by the whole. All economic problems are solved with this key of organic relationship between the whole and the parts. Following Stammler, Karl Diehl emphasises the influence of law and social order on economic phenomena. He lays down the fundamental principle of his thought in the following words:—"All economic phenomena are bound up with definite forms of social organization. Economic theory has to explain those phenomena which make their appearance within the limits of definite organizations of economic life, held together by legal ties."[17] Rudolf Stolzmann[18] has thrown into bold relief the sharp distinction between the natural and the social sciences, between nature and freedom, causality and teleology, and looks upon economic society as an organization imbued with aim and purpose. The ideas of several other thinkers have moved in a similar direction, and in spite of their differences with one another, they have a good deal in common.

Points of general agreement, as they emerge out of recent discussions, may now be noted:—Economics as a science has its province well marked out; it deals with one aspect of social life which is related to the efforts of men to satisfy their wants. The distinguishing principle of economic activity is the general principle of rational human conduct, the principle of minimum of sacrifice. This principle is, however, applied by the individual within the limits of a community and as its organ, and subject to its laws, ethics, usages and traditions. Economic life is nothing preordained, natural and rigid, and we can not scientifically treat it in terms of quantity only. The science of economics, dealing with such life, has no ideal of its own to preach, but its theories which are based upon historical and contemporary events, are calculated to show how the social ends that are proposed may be most efficiently attained. Thus are kept apart the provinces of economics and ethics as sister sciences, as the mixing up and the overlapping of the two does not

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16 "Fundament der Volkswirtschaftslehre."

17 "Theoretische Nationalokonomie", I.

18 "Krisis der heutigen Nationalokonomie."

make for the scientific treatment of problems. It can not, however, be forgotten that though Economics has no ethical judgments to offer and must not tread on the domains of sociology and politics, which are separate disciplines, it can not ignore the intimate relation of these two to itself and the influence of social and political conditions upon economic life. Hence the preference shown by many authors to the name social, national or political economy over economics. This torminology brings out the radical distinction between Economics and the natural sciences with which it got confused in the hands of the classical school. Apart from the fact that we can speak of the art of Economics, political economy is a practical science not only in the sense that it bases its generalizations on facts of actual life, but on the consideration that its theories must throw light on the efficacy of measures which are proposed. It must thus deal with dynamic as well as static social conditions. The economist is, therefore, compared to a physician who, on carefully considering all the circumstances relating to a patient's complaint, suggests what are, according to him, the most suitable remedies to combat the illness. Measures of political and social reform may, in this way, be judged from the point of view of economic science, and economic judgments may be offered. The self-denying ordinance[19] proposed for the economist that he must strictly confine himself to the study of what is and the discovery of the laws by which it has so become and must never venture to overstep the boundaries to say what will be or ought to be, appears to be ill-conceived and unnecessary.[20] It is not enough to know the why and the how of things, and a knowledge of the whither also is essential. The restrictions suggested will render economics sterile and useless and will make of it nothing more than logical gymnastics.

When the mechanical and individualistic conception of economic life is abandoned, it follows that our science has to take adequate account of the mutual relations of different classes and the equilibrium of various forces in working out its theories. Certain activities may be beneficial to the private interests of particular individuals and classes and at the same time injurious to the interests of others; and the government, representing the community, has to set matters right. This is indeed the origin of all labour and other social legislation. The nation organized as a state, is the largest social unit which is bound by ties of rights and obligations and by duties and sacrifices, and if the equilibrium is seriously disturbed by the action and reaction of forces from within or without the community, government alone can rectify the balance. Men and nations can modify and improve their condition indeed within certain limits prescribed by nature, but they are not

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19 Bruno Schultz: "Der Entwicklung der theoretischen Volkswirtschaftslehre."

20 R. Wilbrandt: "Einfuhrung in die Volkswirtschaftslehre," I and IV.

the slaves of the latter, which can be resisted and moulded by organised effort, as the history of the western world demonstrates. List's theory of productive power and his tariff for national uplift receive their best support from these considerations. To speak of world economics and cosmopolitanism in this connection is as unmeaning as to rely on the self-sufficiency of individualism. For the convenience of detailed study we may divide our discipline into pure economy, individual or private economy, state economy, national economy and world economy[21]. But the economy of the most vital importance in the world as it is politically constituted to-day, is national economy. The doctrines of economic science are expected to cover all these branches or phases, and it is now generally agreed that there is no world economics comparable to national economics. We hear now-a-days people speaking (and acting) in terms of nationality and empire in economic affairs; and empire products, imperial markets, imperial preference and inter-imperial migration, are concerned with political policies actually worked out. There is indeed the risk of an economic scientist turning out a party-politician and of his being a bad politician and a worse economist.[22] But this description carries condemnation on its very face. If economists are not to give expert advice, what do they exist for and what is the meaning in our insisting that their co-operation should be sought by government in investigating and solving social problems? Western nations recognize the value of the services of their economic experts.

Now, what has been the trend of economic thought and practice in India during the last few years? It will be found, on a little reflection, that the movement, though slow, has been, consciously or unconsciously, along the lines sketched above. Ideas and policies in this country, were at first under the powerful influence of English orthodox opinion represented by Ricardo, Mill and Fawcett; but Indian thinkers soon broke loose from its grasp, and the revolt is best illustrated by Ranade's masterly exposition of Indian Political Economy. The lead has proved effective. Government in India has, for years, recognized its function of correcting the disturbed balance of social forces by legislating to protect the rayat against the sawkar, the agricultural against the non-agricultural classes, the tenants against the landlords and the workers against their employers. But it hesitated to pursue the same policy in relation to the forces of disturbance coming from outside. Max Weber[23] has said that economic organization is fundamentally rooted in politics, and must, in the last resort, be explained through it. J. M. Keynes showed how the British government and Parliament brought depression on British export industries by their exchange policy of artificially restoring the normal

21 Sartorius von Waltershausen: "Die Weltwirtschaft".

22 Adolf Weber: "Die Aufgaben der Volkswirtschaftslehre als Wissenschaft."

23 Hans Honegger: "Volkswirtschaftliche systeme der Gegenwart."

rate in the middle of 1925; and a similar complaint has been made against government in this country also with regard to the exchange ratio. During the last few years, at least four important public inquiries have taken place in India in relation to questions of great importance, and certain changes which have resulted from them, may be attributed, in no small measure, to the political influence of the Indian legislature. The Fiscal Commission recommended the adoption of a policy of protection and the abolition of the cotton excise duties, and government accepted a radical alteration in its traditional economic policy. As an outcome of another enquiry, the principle of direct government management of state railways had to be adopted, though it had been declared to be un-economic. The Currency Commission condemned the gold exchange standard as utterly unsuited to the peculiar conditions of India though it failed to give sufficient weight to such considerations on the vital question of gold currency and the exchange ratio. The Royal Commission on Agriculture has made one very *striking observation* which goes to the very heart of the matter we are dealing with here. Declaring that the most important factor making for agricultural prosperity is the outlook of the peasant himself and that the success of all measures designed for the advancement of agriculture must depend upon the creation of conditions favourable to progress, the Commission maintains:—"The demand for a better life can, in our opinion, be stimulated only by a deliberate and concerted effort to improve the general conditions of the country side, and we have no hesitation in affirming that the responsibility for initiating the steps required to effect this improvement rests with Government." It proceeds to state that the failure to grasp the full significance of this proposition explains the absence of any co-ordinated effort to effect the required change in the surroundings and the psychology of the peasant without which there can be no hope of substantially raising his standard of living.

The frank and emphatic statement of the Royal Commission furnishes the key to a correct understanding of the larger problems of Indian Economics—a terminology which, by the way, is still found perplexing by some thinkers in this country—and apart from their narrow aspect of immediate political expediency, controversies in connection with such questions as those of the Reserve Bank, reservation of coastal trade, purchase of government stores, railway rates and the investment of foreign capital in India, are not likely to be intelligible in their economic bearings without its help. We have long played hide and seek with our problems. Consider again the condition of the Indian peasantry. The revenue authorities study it from the restricted point of view of taxation and rent, and Ricardo's theory of rent is used or misused in the process. The Irrigation department must be run on a commercial basis and is concerned with its income from water rates to be charged to the cultivator. The Forest department has its own rules to enforce on the

peasantry, surely in the best interest of the nation's valuable property. The Agricultural department wants the rayat to adopt improved methods, and co-operators urge him to join their movement, both with the idea of increasing his income, a good slice of which is, however, taken away by the Indian Finance Member through his exchange policy. The Government and the legislature propose to consolidate his holdings and prevent fragmentation. The local board wishes him to pay higher rates to be able to enjoy greater amenities of life and government can not do without more money coming from the same source. The advocates of khaddar preach to him the virtues of the charkha. And the sawkar is all the while there watching the whole game with interest and curiosity. The problem is thus handled piecemeal, the friends of the rayat play at cross purposes and no body knows exactly how the agricultural industry and the peasant stand economically. It is hardly realized that no amount of research on crops, fertilizers and pure seed—things valuable in themselves—will improve the condition of the peasantry until we study the rayat as a whole as well as in parts. An intensive study of the different aspects of his life and activities is indeed indispensable, and much work has still to be done in this direction. We, in this Conference, have been doing our bit and discussing such problems e. g. marketing and land tenures, and much more needs to be done throughout the country along the same lines. But we must also see things in their proper perspective. The social, the organic, the national point of view must never be lost sight of in all such questions.

It will be superfluous to state that in our teaching and study the foundations of general economic theory must be laid strong and deep, and a weak grasp of it is responsible for much of the inefficiency and futility of Indian education. We have a rich store of literature to draw upon for this purpose, and it has to be fully utilized. Detailed investigation and research into all branches of social life is the great need of the hour in India, and our ignorance in this regard is colossal. Collection of facts and their interpretation will enable us to apply, illustrate and modify economic theory where necessary and even to reconstruct it. And then comes the scrutiny of measures of reform proposed and the formulation of policies for the guidance of government and public. As we can not neglect the first, we must not fight shy of the last. It should not be forgotten that economics has been, from its birth, a theoretical and a practical science and that while inspired by prevalent forms of philosophy, it has had its eye on and not lost touch with reality of life. Recent tendency of thought makes this quite clear, and text-books on economics[24] pay special attention to economic policy, devoting separate chapters or volumes to the discussion of practical economics.[25] The problems to be handled are too numerous to mention here,

24 Philippovich: "Grundriss der Politischen Oekonomie."

25 Wolfgang Heller: "Theoretische Volkswirtschaftslehere."

covering as they do, the whole of India's social and economic life. In studying and expressing opinions on them, the economist has to do his work patiently, scientifically and fearlessly in view of the country's history, its social structure, its philosophy, its political condition and its needs of material development, leaving it to the statesman and the politician to use the lever of authority to carry through measures of national benefit. These are the lines we have to follow in this country, and that is the purpose and the province of **Indian Economics.**

CHAPTER III

THE INDIAN OUTLOOK

15. Progress:—It is obvious that advance in material well-being must largely depend upon a community's will to improve, that is, upon the intensity of the urge of the 'economic motive'—the impulse to save and spend on an increasing scale. Where this force is feeble or lacking, material progress will be slow or conditions will be static. On the very threshold of a study of Indian Economics we are, therefore, confronted with the question of the psychology of the Indian people in relation to wants and their satisfaction; and it is against the background of the normal Indian attitude on life that problems regarding the production and distribution of wealth will have to be discussed. Doubt is often expressed as to the efficiency of the economic motive in Indian society, and therefore, as to the possibility of appreciable or rapid economic development in this country. This question will, therefore, claim our attention in the present chapter.

Examination of the phenomena of social change from the point of view of evolution, has yielded striking results. It is instructive to trace the process through which institutions and ideas relating to religion, morals, politics, industry, trade and social customs have passed before attaining their present forms in different countries. A number of factors combine to produce the result in each case, and a knowledge of their operation under varying conditions and at successive stages of development, is calculated to give useful guidance in the work of amelioration and progress. The history of the world is essentially the history of ideas and institutions and of the rise, decline and fall of communities, nations and states, each leaving its legacy of achievement to those coming after it. They have all made their contribution to civilization which consists in settled life and good government, in the pursuit of sciences and arts and in morals and religion; and modern civilization in the West is indebted to the inheritance received from Greece, Rome and the Teutonic nations as well as from the East. People may be seen even to-day going forward with rapid strides on the

path of development or marking time or in a state of decay. Progress is, however, a complex phenomenon, and there is no recognised infallible test by which it may be judged. While there are certain standards which are commonly used for estimating it, the constituent elements of progress can not be precisely stated because the development is not necessarily even in its course and uniform in the varied spheres of life. A rapid increase of material prospesity is thus not incompatible with moral deterioration, and vigorous intellectual and ethical growth may be accompanied by material stagnation. The action and reaction upon one another of a variety of forces which operate with varying degrees of intensity will have produced a certain social state at a given time and in a given country; and the condition is the sum total of development simultaneously taking place in different directions.

Though human advancement from the earlier to the later states of existence is an indisputable and an undisputed fact, there is a divergence of opinion regarding the nature and the prospects of progress. There are some who do not see in modern civilization any improvement over its predecessors, and, in any case, deny the possibility of our indefinite advance from good to better.[1] "Are people physically stronger than they were in the past? Have the triumphs of physical sciences, of our discoveries and inventions, really made the lot of man happier? Is there greater love, freedom and equality among the peoples of the earth? Is there not greater social conflict and more discontent in the world than there were ever before?" With the pessimists who ask such questions, the technical, political and social advancement of recent years is at a heavy discount. But the progress which consists in an increase of knowledge, power and fellow-feeling,[2] has not been and can not be denied; and that human acquisition has likewise not been renounced. Happiness has indeed been sought from the source of spiritual peace and contentment rather than that of material enjoyment, but as a matter of common experience, the latter has had a greater attraction for man, and the love for it is admittedly instinctive, universal and extra-ordinarily powerful. It serves no useful purpose, therefore, to treat the desire for material improvement with scorn, and everything is to be gained by trying to study and regulate it.

The well-being of individuals and communities is undoubtedly not determined solely by the material wealth produced and consumed by them. Nevertheless, a little reflection will show that material betterment constitutes a valuable criterion of their progress. Man is born into a social life, with individual wants and desires and family and communal duties and responsibilities imposed on him. The desire for freedom from pain and for power and pleasure, appears to be inherent in human nature, and has been manifested in individual and group life in every epoch of world's history; and popular feeling of discontent or satisfaction in respect of material conditions at a given moment, is an index to the common appreciation of the idea of progress. It should be borne in mind, besides, that ideals and standards of well-being change with the modification of material conditions and social institutions, and what was gross and superfluous yesterday becomes necessary and refined to-day. Steady increase of population, spread of knowledge and enlightenment, maintenance of peace and order, cultivation of refined tastes, improvement of public health, augmented production of wealth resulting from the application of physical science to industry, easier accessibility of intellectual comforts and social amenities to continually growing numbers in the community—these are generally regarded as satisfactory indications and tests of progress; and to secure advance along those lines is the commonly avowed aim of private and public effort.

16. Wealth and Welfare:—The material wants of man are unlimited in number but even their full satisfaction does not ensure to him complete or lasting happiness. Man does not live by bread alone. He can not, however, live only on metaphysical speculation either. Materialism which prefers the external sources of satisfaction to the internal, has been denounced by most teachers of religion and morality; and the individual pursuit of wealth and the social organization which results from it, are represented as being a challenge to high ethical principles and spiritual ideals. Those who take this view, do not, of course, contend that an increase of material wealth brings no satisfaction or that it adds nothing to welfare. But they do hold that the satisfaction obtained from external objects through the senses, is conditional, evanascent and uncertain and is consequently inferior to spiritual happiness which is absolute and permanent. Materialism is, according to them, nothing but the

pursuit of a mirage and they urge that as 'the fruit of the tree of knowledge always drives man from some paradise or other',[1] it is desirable that man should straight off seek the peace and the joy of the soul instead of wading to happiness through the mire of material pleasures. To attach exaggerated importance to material pleasures is certainly a mistake, but to ignore them and to indulge only in talk about matters spiritual, is no less erroneous. The whole history of humanity is an instructive demonstration of the futility of the extreme advocacy of spirituality which one often comes across.

The ideal of renunciation is as old as civilization itself, and individuals have practised the simple life in which wants are reduced to the barest necessaries of existence and contentment is sought independently of the possession of the goods of this world. Modern economic organization and modern conceptions of welfare have, on the other hand, tended more to emphasise and glorify external sources of satisfaction though material wealth is not unoften regarded as an effective means to attain a higher end. It is common to identify welfare with wealth and the condition of a nation, as of an individual, is guaged by the measure of money income. It was such an exaggerated and one-sided view of wealth and its importance, that brought on the modern economic regime and on economic doctrines generally, the righteous wrath of thinkers like Ruskin and Carlyle and rendered economic science an object of scorn and denunciation.[2] The emphasis which the Classical economists laid on the universal operation of the feeling of self-interest and the undue weight they attached to the beneficence of unrestricted competition, were indeed an adequate provocation for such attacks. Economists are no longer so dogmatic and one-sided. As a matter of fact, Economics does not preach selfishness; nor does it place the pleasures of the senses on a higher plane than spiritual contentment. Only, it takes human beings as they are constituted and studies their actions and motives with reference to their daily routine of the acquisition and use of material wealth.

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1 Dean Inge: 'The Idea of Progress'. The well-known Sanskrit verse beginning with 'निःस्वो वष्टि शतं, शती दशशतं, लक्ष सहस्राधिपो' and ending with 'आशावधिं को गतः?' expresses the same view widely held in India.

2 See Ruskin's 'Unto this Last' and Carlyle's Essays.

It examines the methods and institutions which have grown up in this sphere of human life and suggests ways for their improvement. There is no better justification for looking down upon Economics for concerning itself with these matters than there will be for depreciating the science of Medicine for neglect of man's spiritual well-being and studying his bodily ailments with a view to discover remedies for their prevention and cure. It is not the province of Economics to determine what is morally right or what is spiritually good. It has its own standard and test; it does not, on that account, however, exalt its principles to the status of universal and unerring guides to human conduct. But though economic science does not make it its business to pass ethical judgments, it is not unmindful of spiritual welfare and does not omit to take into account altruistic sentiments and moral ideals in order to correlate its conclusions to facts of individual and collective life.

17. Pessimism and Progress:—Economics is, comparatively speaking, a young science, and its growth has been stimulated by the increasing complexity and strenuousness of modern material life. Recent progress of humanity has chiefly lain in man's expanding control over the powers of nature and their ever-growing utilization for the promotion of his happiness. As new utilities are discovered and the range of objects calculated to satisfy human wants extends, consumption and production, demand and supply, endeavour to chase, without overtaking, each other. At the beginning of the last century, Malthus was at a loss to know how means of subsistence could be found for the rapidly multiplying population of the world and thought that famine and pestilence would, in the absence of moral checks deliberately applied, inevitably cut down numbers to the limits of the food supply. These apprehensions have not been wholly falsified; but the conditions which inspired them having been radically altered owing to the progress of physical science and improvement in economic organization, it has become possible, especially in materially advanced countries, to maintain a much larger population on a higher standard of living. The changes associated with the new system of production, exchange and distribution of wealth have, of course, had the effect of making the social organization more complicated and of intensifying the struggle for existence, thereby lending support to the idea that modern civilization is a delusion and a snare.

It is not difficult to show that this pessimistic view of the subject suffers from a good deal of misconception and exaggeration. People who see nothing but unrelieved gloom on the horizon and fail to perceive any redeeming features in the materialism surrounding them, cast 'a longing, lingering look behind' on a golden age which they locate some where in the past. They fail to realize that their sweeping condemnation of the economic aspect of modern civilization would equally apply to other social phenomena, and politics and jurisprudence, for example, would not escape the censure passed on economics. Thus, if their line of reasoning were rigidly followed, modern democracy, with its struggle for individual freedom and political rights, would have to make room for the simple autocratic forms of government which it has displaced; and the happiest epoch in the history of mankind would be that when man had not yet emerged from the savage state! The lot of the primitive man would, in that case, become enviable as he had very few wants and cares; and what needs he felt, he could presumably satisfy without much trouble.[1] The prospect of returning to the conditions of by-gone times, to the state of nature, is assuredly not cheerful; and the fact is indisputable that even the savages had to carry on a perpetual struggle against the forces of nature and against one another and had to wander over the face of the earth in search of food and shelter. Lest it be thought that this is a caricature, let us take any stage of human social development above that of sheer barbarism. It will be found to represent more worries, a more complicated system of living and greater effort to satisfy the growing wants than what had characterised preceding states. You can not stop at a particular stage and say 'here was man's paradise of earthly existence!'

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1 "But this is merely to argue, what is of course true in a certain sense, that the beast is happier than the man, the savage than the civilized man, the fool than the wise man, the lout than the active man, the dolt than the refined man............The pessimist can plausibly argue that man would be better off without the instinct, the urgence which impels him to explore, investigate, analyse, subdue, and exploit the costitution and the latent energies of the matter which surrounds him! but that is an academic opinion of no practical moment since all denials of the value of progress have never induced any body of men (individual eccentrics apart) to renounce its conquest and deliberately to return to a by-gone stage of development."—The R. P. A. Annual, 1921.

Pessimists would not apparently like to part with the conveniences and comforts which the advance of physical science has placed within the reach of mankind and which constitute the basis of contemporary civilization. They would assuredly not be prepared to deprive the mass of humanity of the benefits which it now derives from the growing use of machinery, steam and electricity. They forget that the simple mechanical devices of the older civilizations, such as the plough and the water wheel, the charkha and the handloom and the horse carriage and the weapons of the chase, the fisherman's net and the potter's wheel, were nothing but contrivances laboriously fashioned as means to achieve greater material happiness. If their attitude, therefore, is to be taken to imply only a protest against the selfishness, the bustle and the strife which seem to be characteristic of modern civilization, Economics will have no exception to take to it. That science does not object to the ideal of plain living and high thinking, and is only concerned to secure to the large mass of human beings a living, plain but sufficient, in fact, their daily bread so as to make it possible for them to think of higher things. The history of the world shows that each tribe, community and nation has been confronted with this problem of securing a living and that it has tried to face it in its own way. Conditions in our time are radically different from what they were even in the near past. Means of communication are becoming daily more rapid and easier and the peoples of the earth are being brought into closer touch with one another. The steady increase in the world's population, the growing popularity of democratic forms of government, the advance of physical science and the extension of international commerce are forcing new problems to the front while old institutions have become out-of-date and traditional remedies are seen to have lost their potency. It has, therefore, become necessary for each community to adjust itself to the changing conditions in the best possible way and for thinking minds in all countries to devise means to maintain human civilization, taken as a whole, in a state of healthy equilibrium.

18. Ethics and Economics :—An important aspect of this question relates to the belief that purely economic wants and the efforts made to satisfy them, have little moral value and that the highest good of mankind can be achieved only by the individual

pursuit of spiritual ideals. It is obvious that the very existence of man depends on the satisfaction of at least his primary wants which can not, therefore, be ignored and that there would have been no civilization worth considering to-day if past generations had not striven, according to their lights, to promote their own material well-being and had remained content with things as they found them. Being itself a social science, Ethics points out the right standard for man's conduct as a member of society, with obligations and duties towards his fellow-beings which, of course, involve the satisfaction of material wants. Moral ideas are themselves based on human needs and experience and on what is commonly accepted as beneficial and necessary and what, therefore, has to be done or avoided.[1] The elementary physiological wants of man create a desire to secure objects calculated to satisfy them. The resultant activities of the hands, the mind and the brain develop the individual and social qualities characteristic of the human being and constitute the foundations of civilization. Egoistic impulses are as innate and instinctive in human nature as the altruistic, and Ethics aims at the perfection of the self through the harmonization of the two and not the suppression of either. The two are complementary, and economic desires and activities are thus both the cause and the effect of such sentiments as those of love, sympathy, benevolence and fellow-feeling; and customs, institutions and ideas grow up in which self-interest, instinctive and enlightened, comes to be identified with common good. The bread-winner toils as much for the happiness of the family as for his own, and workers combine and co-operate for the security of the community as a whole. There can, therefore, be no inherent opposition between what is economically desirable and what is morally right, and whatever conflict arises, is due to the overstressing of the one or the other aspect of life.[2]

The belief is widely held that the triumphs of modern civilization have made man more self-seeking, dishonest and callous and

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1 See C. T. Gorham's "Why We Do Right."

2 "Broadly speaking, regarded from the point of view of society as a whole, what is economically advantageous must in the long run be right and what is correct in ethics must in the end also be profitable to the business world. The modern economist, therefore, has become just as mindful of the ethical aspects of every economic problem as the modern moralist has been forced to recognize the economic side of his ethical problem."—Seligman: Principles of Economics.

have lowered the general moral tone of society. This is clearly a one-sided view of the situation. While it is true that the temptations and the means of gratifying sensuous desires have multiplied, and material obligations appear to fill a large space in man's life, it may be urged with justification that moral considerations are having greater sway over the individual and the communal mind and that the social and the economic institutions of the day are widening the basis of human sympathy and, even according to hedonistic philosophy, are tending to accomplish 'the greatest good of the greatest number'.[1] The modern systems of national and international trade, banking and finance and concerted action for the moral and the material improvement of the peoples of the world presuppose and strengthen mutual trust and sympathy and go to indicate that the ethical sense of mankind is perceptibly growing more pronounced every day. It is, therefore, essential to bear in mind the good points of the modern economic regime along with its evils. Production of wealth on a more extensive scale is placing within the reach of increasing numbers the means of education and culture; and intellectual and social amenities are no longer the monopoly of a few favourites of fortune. Materialism may be justly condemned in persons and classes blessed or cursed with ill-gotten and ill-used superfluity; but it would certainly be the height of cruelty to preach spiritual contentment to the millions who can not satisfy even their elementary wants. However lofty our spiritual ideals may be, the craving for material necessaries and comforts of life is a fact from which we can not get away; and a systematic study of economic activities and institutions directed to the discovery of the underlying principles and the enunciation of the governing laws, therefore, assumes an importance which it is not possible to deny.

19. Position in India:—This discussion of the nature of wealth and welfare and their relation to each other, is particularly relevant in view of the misconception and the conflict of opinion

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1 "Each new want is an additional bond between men, since we cannot, as a rule, satisfy it without the help of our fellows; in this way the feeling of solidarity becomes stronger. The man who has no wants, the anchorite, is sufficient to himself; this is just what he should not be. As for the working classes, we should be glad, and not concerned, that new wants and desires torment them unceasingly; were it not for this, they would have remained in perpetual bondage."—Charles Gide: Political Economy.

which prevail with respect to the subject in and outside India and of the special bearing it has on the economic development of this country for which great solicitude is evinced on all sides. The orient and the occident appear to be so sharply divided in all respects that it is usual to contrast the spirituality of the Indian people with the materialism of the West; and while the contrast is generally cherished as a compliment by Indians, it is often made by outsiders through a feeling of depreciation mingled with pity. The difference between the two attitudes strikes the superficial observer as fundamental, and Indians are either raised to the heights of superior beings or relegated to the category of inferior races. Indian spirituality is understood as a system of metaphysics which makes the renunciation of worldly thoughts and affairs as the primary condition of human happiness or is conceived as a mysticism or fatalism which is indifferent, if not hostile, to material life. Western materialism is represented, on the other hand, as a robust and optimistic philosophy of action and progress. As a people's general outlook and their motives of action are bound to have a profound effect on economic conditions and prospects, it will be useful (1) to find out what support the above views receive from the evidence of history, (2) to compare Indian with Western ideals, (3) to ascertain in what particulars lies the peculiarity of the Indian attitude, and (4) to indicate the present tendencies and the lines of advancement for the near future. The nature of India's destiny must depend, to a large extent, on whether renunciation and poverty were and are to be her ideals or Indian life was and is to be inspired with motives which are calculated to make for all-round progress.

Compared with the west, India taken as a whole, presents the appearance of mediaevalism, of rustic dullness and of poverty, and these are often taken for rural simplicity, peace and contentment. The picture has a few striking touches indicating that while passing through a transitional state, the country is, in parts, on the threshold of modern industrialism. It must be borne in mind here that modern material civilization has put on its distinguishing phase only within the last few generations; and because India is poor, the wants of her people are limited and rude agriculture is her principal industry, it can not be concluded that she is inherently and unalterably too spiritual, too dreamy and too weak to be capable of any

national achievement or advance in the material sphere.[1] The whole history of India runs counter to any conclusion of that import. There is ample evidence available to show that even in ancient times India was rich in the goods of this world as well as in spiritual and cultural wealth; that her people desired and enjoyed material pleasures in the same way as any other nation, ancient or modern; and that sciences and arts were, for centuries, vigorously cultivated within the borders of the country. The backwardness and poverty which characterise India to-day, are not, therefore, due to inherent incapacity of the people to appreciate the satisfaction yielded by material objects; nor are they the effects of excessive preoccupation with the thoughts of the other world and a studied indifference towards the affairs of mundane life. Vicissitudes of fortune have spared no race or country, and civilizations have either stagnated or died out after making a little splash. This fate has successively overtaken many an Asiatic civilization the relics of which reward the researches of archaeologists and orientalists, from time to time; and the civilizations of ancient Greece and Rome have not fared better. The peculiar merit of Indian culture lies in this that it has exhibited wonderful vitality in surviving, instead of succumbing, to, the shocks dealt to it during a period of three thousand years. It marks time to-day but has already demonstrated its marvellous adaptability and capacity to benefit by environments.

20. Evidence of History:—Ignorance, superficial observation and prejudice are chiefly responsible for the view commonly held on this point. The robust optimism of a people setting their feet on the path of material advancement, reflected in the Vedas, admittedly the earliest recorded expression of human thought and sentiment in the world, the achievements of progressive civilization portrayed in the Ramayana and the Mahabharata, the splendid empires of Chandragupta and Ashoka, of Samudragupta and Harsha

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1. Ruskin's exhortation to his countrymen to return to the gorgeous East their borrowed ideas about possessive wealth, is an interesting commentary on this view. He says:—" Nay, in some far away and yet undreamt of hour, I can even imagine that England may cast all thought of possessive wealth back to the barbaric nations among whom they first arose and that while the sands of the Indus and adamant of Golconda may yet stiffen the housings of the charger, and flash from the turban of the slave, she as a Christian mother, may at last attain to the virtues of a Heathen one, and be able to lead forth her sons saying ' these are my jewels".— *Unto This Last.*

in the North and of the Chalukyas, Rashtrakutas, Cholas and otheir ruling families in the South, would have been impossible if the people of India had scorned the joys of the earth and had been incapable of worldly advancement. Their daring navigation, adventurous colonization and extensive overseas commerce, carried the fame and the culture of India far to the west and the east. Indian cloth, timber, spices and precious stones were transported in Indian ships by Indian merchants to the coasts of Persia, Egypt and the Mediterranean. Foreign visitors like Megasthenes, Huen Tsang and Alberuni were attracted as much by Indian sciences and arts as by the literature and philosophy of the people. The history of Indian culture was long unknown, obscure and neglected; and while the glories of ancient Greece and Rome were a familiar subject in our colleges, the splendid civilization of ancient and mediaeval India was a sealed book to the educated classes. Researches of Sanskrit scholars during the last generation have, however, thrown a new light altogether on Indian history and it is now demonstrated[1] on the authority of indisputable facts recorded in documents, carved in stone and inscribed on metal that for several centuries, 'India was in the vanguard of the world's civilization,' both material and spiritual, and played an important part in the progress of humanity, which compares favourably with the contribution made to it by any other country.

Owing to causes which need not be referred to here, the course of this civilization was interrupted, and centuries of deterioration and stagnation succeeded. But even these degenerate times witnessed the rise and fall of the Vijayanagar, Mogul and Maharrtta empires whose history does not lend the least support to the theory of Indian passivity and renunciation. To the westerner, India has ever been a land of mystery. The European adventurers of the seventeenth and eighteenth centuries thought that this country contained vast material wealth, actual and potential, though its people were heathens,

1 "Much of the prevalent notions regarding the alleged inferiority of the Hindu genius in grappling with the problems of this mundane sphere and the extra proneness of the Indian mind to metaphysical and impractical speculations can vanish and be proved to be results of mal-observation and non-observation leading to 'half truths which are really whole errors, only if we apply the historico-comparative method in studying Indian facts and phenomena."—Sacred Books of the Hindus, Vol. XVI.

with savage superstitions and uncouth manners. Burke had to tell the members of the House of Commons that "this multitude of men does not consist of an abject and barbarous populace, much less of gangs of savages like the guaranies and chiquitoes who wander on the waste borders of the river of Amazon or the Plate" but that they were "a people for ages civilized and cultivated by all the arts of polished life while we were yet in the woods.[1]" Practical administrators and statesmen who saw the people of India at close quarters, realized that while backward in respect of modern science and education, the latter possessed all the essential elements of a civilized nation. Sir Thomas Munro, for example, went so far as to declare that far from being inferior in matters such as manufacturing skill and productive capacity, India had a great deal to teach to England in respect of civilization.[2] These opinions may strike some as very singular; but they are easily explained by the fact that before England took the lead in inaugurating the era of the industrial revolution in the beginning of the nineteenth century, that country, to say nothing of the rest of Europe and of America, was hardly more advanced than India. In fact, England's economic history before the epoch of mechanical inventions, reads like the story of a backward, rude people rather than of a progressive go-ahead nation; and it is significant that the products of the arts and crafts of this country could, for years, hold their own against British manufactures though the latter enjoyed the advantages of machinery, steam power and a national policy of protection.

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1 "There is to be found......a nobility of great antiquity and renown; a multitude of cities not exceeded in population and trade by those of the first class in Europe; merchants and bankers who have once vied in capital with the Bank of England, whose credit has often supported a tottering state and preserved their governments in the midst of war and desolation, millions of indigenous manufacturers and mechanics, millions of the most industrious and not of the least intelligent tillers of the earth."—Speech made in introducing the East India Bill.

2 "But if a good system of agriculture, unrivalled manfacturing skill, a capacity to produce whatever can contribute to convenience or luxury; schools established in every village for teaching reading, writing and arithmetic; the general practice of hospitality and charity amongst each other; and above all, a treatment of the female sex full of confidence, respect and delicacy, are among the signs which denote a civilized people then the Hindus are not inferior to the nations of Europe; and if civilization is to become an article of trade between the two countries, I am convinced that this country (England) will gain by the import cargo."—Quoted by R.C. Dutt in his 'Economic History of British India'.

21. A Comparison :—The conditions which have shaped the course of occidental civilization may be recalled in this connection, and it will be found that the religious, commercial and political history of Europe in the first three centuries of the modern period sheds a flood of light on the subject. The geographical situation and the physical features of a country largely determine the character of the culture which its people develop, and the influence exercised on it from outside, is often not inconsiderable. Thus the capture of Constantinople by the Turks, the continuous conflict between the cross and the crescent, the religious schism in Christendom, the growth of national states and national churches, the discovery of the new world, the struggle for the possession of the precious metals, the commercial rivalries which led to the fight for the monopoly of trade with the East, the position of England in the North Sea—these factors successively operated to give British and Western civilization generally the turn it has taken. Similar currents in Indian history may be pointed out, and it will not be difficult to understand the process of evolution in this country and also the causes and the effects of the impact of the West upon the East.

The varied climate and the abounding natural resources of the plains, valleys and mountains distributed over this subcontinent,did not require the people, in many parts, to keep up with nature a constant struggle for existence and led them to easy contentment. The mountain barrier on the North-west did not, however, succeed in warding off foreign invasions, and in the later period of history, the long coast line only invited them. The vastness of the country and the variety of internal conditions rendered the maintenance of peace and national unity impossible and the history of ancient Greece was repeated here on a much larger scale. The need of local self-defence imposed restriction of economic activities and the hereditary specialization of functions. Small communities and townships tended to become self-sufficient economically as well as administratively, individual and group life flowed in narrow grooves and self-preservation and conservation constituted the highest social aim of the people. Religion, philosophy, laws, government and social organization were all brought into harmony with these conditions and with one another.

The social organism is a complex product, and although its condition at any given stage is highly coloured by a dominant

factor, it can not be attributed exclusively to the operation of a particular cause as a normal phenomenon. Religion, and philosophy lying at the back of it, have profoundly affected all peoples, but the material side of life has had an influence in no way less effective. It is, therefore, not correct to conclude that Western and Indian civilizations, as we find them do-day, are a more or less faithful reflection of their respective religions and philosophies of life. It will perhaps be nearer the mark to assert that there is here more perversion of the original than close adherence to it. Three facts are worth notice in this connection. First, Christianity which is professed by the materialistic West, emphasises the spiritual ideal and a life of renunciation as strongly as any other religion.[1] Millions of people in western countries are dominated by religious ideas and superstitions[2] no less than those in the east; and the propagation of the message of the founder of Christianity is as zealously pursued as the extension of the sordid business of trade in heathen lands. Secondly, Christian theologians, churchmen and philosophers affirm that modern civilization is a negation of the religion of Christ and deplore public apathy towards the all-important problem of Christian salvation.[3] And thirdly, a return to a truly Christian life is being earnestly advocated and efforts are being made to bring the spiritual and the material sides of man and his activities into harmony with each other.

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1 "Christianity as a religion is entirely spiritual, occupied solely with heavenly things; the country of the Christian is not of this world. He does his duty indeed, but does it with profound indifference to the good or ill success of his cares. Provided he has nothing to reproach himself with, it matters little to him whether things go well or ill here on earth. If the State is prosperous, he hardly dares share in the public happiness, for fear he may grow proud of his country's glory; if the State is languishing, he blesses the hand of God that is hard upon his people."—Rousseau's *The Social Contract.*

2 The agitation in the United States of America against the teaching of the doctrine of evolution in the schools and the prosecution and conviction of teachers for the offence, in this age of freedom and enlightenment, are interesting.

3 "As a matter of fact, it is not only the question of war that raises a difficulty between the ideals of Jesus and the traditional practice of the Churches; the problems of justice and law, of crime and coercion, of marriage and divorce, of industry and thrift, of wealth and commerce in all their forms are raised in the most uncompromising way by the Sermon on the Mount, which challenges the whole structure and practice of civilised society."—*Alfred Loisy*: "The War and Religion."

22. The Ideal and the Actual:—Churches and priesthoods, philosophers and moralists, saints and prophets have, in all ages and in all countries, laid down precepts for human conduct in this world with their gaze fixed on the next and have evolved systems of thought to explain and justify them. These have gone under the all-embracing name of religion as it is popularly understood and commonly practised. The contradiction between religious precepts and the life of those who are expected to follow them, is generally attributed to the failure of the latter correctly to understand and courageously to act up to them rather than to the futility of the former ; and it comes to happen that while man is powerfully influenced by religious ideas, changes in his material and social state bring about a modification of the practical religion of the mass of humanity, the philosophy behind it remaining unaffected. And there is little relation between religion and the conduct of men as if the two had nothing to do with each other. This is equally true of all the religions of the world. The basic spirituality of Christianity is too pronounced to be doubted, but it is overlaid in the West to-day by the consciousness of man that by developing his power to control and manipulate matter at will, he can mould his own destiny without giving much thought to the spirit within. Though the latent spirituality is revealed in the readiness of individuals to die for a cause and to undergo sacrifices for a humanitarian ideal, the strident materialistic impulse holds sway over western society ; the intoxication of success drives the people deeper into materialism ; and still the accumulation of wealth and pleasure brings no corresponding happiness. There is visible a growing apathy towards the church in the West, which is deplored by the priestly class. In India, on the other hand, an overpowering sense of the infinite pervading material life and the weakness of man in the face of the mysterious energy which directs nature, have turned his thoughts inwards and made him indifferent to the improvement of the physical means of welfare. But in the practical life of the mass of the people, asceticism and renunciation are seen to play an inconspicuous part, and their economic activities, their industry, trade and banking, though confined within narrower limits, are not essentially free from the evils associated with materialism.

It is interesting to observe that there are two contradictory theories and remedies suggested with reference to the admittedly

among others, symptoms of a stationary and decaying condition of society. Western influences have already provided a solvent to it, and the steadily expanding freedom must be welcomed as offering a reasonable chance to millions to realize their humanity[1]. What deserve to be conserved are not the perversions of India's ancient culture; and the orthodoxy which cloaks idleness, selfishness, greed, inequality, injustice and cruelty, is certainly not better than western materialism. While conscious of this consideration, Indian Economics must, however, carefully watch the effects of the introduction of the modern mechanical civilization on the real welfare of the people of India, because some of the evils associated with it, are already apparent. Overproduction, speculation, monopoly, adulteration, profit-hunting, competition, class strife, over-advertising and unemployment are to be seen in our midst in their sinister forms, and their infection is fast spreading into the heart of the social organism. India is fortunately generously endowed by nature and the inheritance has to be used to the best advantage of her people. Her economic system must, therefore, be so adjusted by the collective and the individual power of the nation as to facilitate her march to the goal of common humanity.

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1 "Wealth gives liberty in this sense: it increases opportunity giving the possessor more choice in the use of his time and fuller means of self-determination or self-expression. The effect of an increase of wealth upon welfare may be neutralized by misuse or waste: the increase must be balanced against any change for the worse in the conditions of production, and allowance made for the indirect effects which an increase in one person's wealth may have upon other people's welfare. But the increase in opportunity remains; there is a potential increase in welfare."—Henry Clay: "Economics."

CHAPTER IV

GIFTS OF NATURE

28. Economic Wealth:—The last three chapters were devoted to a preliminary survey of the field of study which will now be explored and were designed to prepare the reader for the task which has been undertaken in this book. Having indicated the nature, the purpose and the scope of Indian Economics and having examined the Indian outlook on material progress, we are in a position to embark upon the investigation of the conditions in which wealth is produced, exchanged, distributed and consumed in India. But before doing so, it will be useful to point out the exact relation between the proposed enquiry and the conclusions arrived at in the course of the foregoing chapters. The attainment of absolute and lasting happiness is the goal of man's life on earth. It is to be attained by self-realization which can be achieved only by the harmonious development of all human faculties in the highest degree possible. Sensibility is as essential a constituent of the human being as spirituality, and as the former can not be eliminated, it must be controlled and regulated. Though it is a state of conciousness, welfare is largely determined by the satisfaction of the senses obtained by the use of material objects. The life of man is ordinarily preoccupied with thoughts and actions which have reference to physiological and conventional wants, and Economics has selected this field for its special investigation. The lower animals have a similar physiological craving. They instinctively know the means of satisfying it and make the necessary effort for the purpose. Being endowed with self-consciousness, reason and volition, however, man multiplies his wants and steadily improves the means of gratifying them, both individually and collectively. Human civilization consists both in the triumphs achieved by men in the domain of material progress and in the victories won in the sphere of spiritual development. The material aspect of civilization relates to the efforts of man at the acquisition of the objects of his desires, which constitute the starting point of economic inquiry.

In Economics, wealth is the name given to all objects and services for the acquisition of which man is prepared to sacrifice his natural desire for ease, without direct reference to ethical considera-

tions. The principle on which man is seen to act is that of minimum of effort for the maximum of gratification. The trouble and the discomfort of acquisition constitute the cost incurred for the gratification of desires and measure the importance or the 'value' of the objects sought. All wants can not be gratified by a person directly producing objects himself, and these have to be obtained by means of exchange of commodities and services for one another. Acquisition by exchange plays an increasingly important role in economic life with the multiplication of wants and the expansion of the division of labour. There are certain goods or forms of wealth which are free gifts of nature and have, therefore, no economic significance. Their number and importance, however, decrease with social development, and at each stage, economic effort assumes greater prominence. The extension of markets and the vast scale on which goods are produced, in anticipation of demand, have revolutionized economic organization, and consumers are as keenly sought by producers and traders as suppliers of commodities and services by consumers. But the motive force behind the whole mechanism of industry and trade, is the desire to acquire goods and services which are calculated to satisfy individual wants. The economic welfare of individuals, classes and communities is governed by their capacity to acquire wealth and is, therefore, measured by its acquisition.

The question that will obtrude itself on the attention of the reader here is, how is it that the bulk of the people of India are so weak in this power of acquisition in spite of the natural and other advantages which this sub-continent admittedly enjoys? Variety of climate, rich, fertile soil, abundant supplies of mineral and forest wealth, an industrious, skilled and peace-loving population, a progressive government and an enlightened and up to-date administration—these resources and means of economic prosperity ought to place India on a level with the advanced nations of the world. How is the anomalous position then to be accounted for[1]? Is the explanation to be sought in the

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1 The position will be found tersely summed up in the following observations of Cunningham :—"A population of peasants ignorant of everything but the simplest and humblest forms of life, is maintaining itself, by rude and comparatively unprofitable agriculture, at a low level of existence. The life of millions is one of few pleasures and constant hardships, varied by signal privations whenever any vicissitude of a precarious season lessens the available supplies of food in any locality. Meanwhile the whole physical world around them, rich in innumerable opportunities for the creation of wealth, is to a great extent unutilized and almost unexplored."—"British India and its Rulers."

lethargy of the people, their dullness and absence of enterprise, in defective organization of industry and out-of-date and inefficient economic methods? To what extent is lack of individual initiative and of State encouragement and direction responsible? What contribution do these factors, severally and jointly, make to the result? Our investigation ought to supply an answer. We have shown in the last chapter that the science and the art of earning a living (वार्ता) were sedulously cultivated in India in olden times, that they were assigned an important place by the side of the science and art of government, philosophy and theology. The economic motive was likewise not ignored but duly recognized. The methods of economic life must, however, change with changing times and have to be adjusted to altered conditions. How this is being done and ought to be done if the economic mechanism is to prove efficient, is the problem which Indian Economics is expected to investigate and solve.

29. Importance of Production :—It being assumed that the well-being of the people in India, as in other countries, is intimately bound up with the amount and the quality of wealth they can produce, the main problem which demands attention is how to increase the supply of the necessaries of life and of comforts which constitute what is known as the standard of living and the national dividend and which fall to the share of the different classes that make up the community. A people can consume only what they produce or can secure from others in exchange for their surplus wealth. Production is, therefore, a human activity of capital importance, being the only means of securing material enjoyment, 'free' goods, charity and theft being, of course, ruled out of account. The general standard of living is admittedly low in India, and the people are poor because the quantity of wealth produced by them is small. Whether the income per head of the population is Rs. 30 or Rs. 100, the poverty of the country is an undisputed fact. We undoubtedly hear of poverty, destitution and misery in western countries and of the endeavours made there to cope with the evil. But the economic situation in India in this respect is radically different from one that confronts other nations.

1 "Poverty in England, or America or Germany is a question of the distribution of wealth. In India it is a question of its production .....Suffice it to say that if it (the income) has mounted to any considerable degree since the Commissioners in 1880 estimated it at £ 2 per caput, it is still infinitely below that of any of the leading nations in Europe, if not actually the lowest in the world."—Loveday : The History and Economics of Indian Famines.

unsatisfactory condition of India at the present moment. According to the first, it is the spirituality innate in Indian culture that is responsible for the state of affairs which can, therefore, be improved only by the infusion of western ideas and the introduction of modern methods of life ; while according to the second, India's ills are due to the advent of the materialistic influences of the west and can be cured by nothing but the revival of the ancient modes of thought and conduct. As is usual in such cases, the right course lies between these two positions. Compromise and change is the essence of life ; and it will be shown presently that the principle of adjustment and reconciliation has animated the whole history of Indian civilization. Each country has undoubtedly its characteristic culture ; but it both learns and teaches. Christianity itself which is an Asiatic product, bears distinct traces of Buddhistic and Vedic influences, and in the world of to-day, immunity from change is more difficult than it ever was before. The contradiction between Christian ethics and the materialism of Christian nations is glaring; and it should be noted in this connection that the East has been characterised by Westerners both as 'gorgeous' and 'barbaric' and as spiritual and pessimistic. Here is a paradox that needs to be clearly understood.

23. Cultural Adjustment:—The so-called ascetic ideal of India did not stand in the way of the political, industrial, artistic and commercial development which went on for centuries under Hindu, Buddhist and Mahomedan emperors and kings. Works on Nitishastra, Dharmashastra, Shilpashastra and Arthashastra compiled centuries ago, embody principles and laws concerning administration, social organization, economic functions, and the practice of arts and crafts, and demonstrate beyond the shadow of a doubt how these matters were viewed from the point of view of communal and individual welfare and how the spiritual and the material aspects of human existence were statisfactorily harmonised by the teachers and the statesmen even of remote antiquity. From the time of Kautilya's Arthashastra down to Abul Fazle's Aine-Akbari, the administration of kings has been inspired with the solicitude to promote the material and moral well-being of the subjects and the prosperity of the rulers. For illustrations we need not go to the distant past. Muslim rule under the predecessors and successors of Babar, brought two different civilizations face to face, and some sort of adjustment

had to take place between them.[1] The story of the Bahamani kingdoms and of Vijayanagar is instructive and their very ruins revive interesting memories. Shivaji, a devout Hindu, a disciple of Saint Ramadas and an admirer of Saint Tukaram, laid the foundations of the Maratha kingdom with the assistance of the leading men of different castes who were all under the spiritual influence of the saints and prophets of Maharashtra, and Brahmin warriors like Balaji and the first Bajirao under similar influences, built up the Maratha empire. The Hindus had their civil and military administration, their wars and treaties, their palaces and pleasure gardens, their luxuries and superfluities. Pursuit of wealth and glory took the Hindus thousands of miles away from their homes to the north and the south, and this is surely not indicative of the influence of the ideal of renunciation. If they had no big factories and banks and did not carry on industries on a large scale, none of the western nations were ahead of them in that respect till the close of the eighteenth century. What is said of Hindu ideals to-day can be said of the ideals of western races during the middle ages and three centuries succeeding them, and of some European peoples even to-day.

Proceeding to consider contemporary India, one must bear in mind that one must expect to find a continuation of the process of adjustment and assimilation which was at work while the country was brought under the influence of an alien civilization by a few centuries of Muslim rule. The people of India to-day are not all Hindus, hampered in their worldly activities by ideas of passivity and fatalism. Both politically and economically, the country is under European domination; and its population includes, among others, millions of Muslims, for instance, whose democratic and optimistic ideals are not antagonistic to material advancement. In fact, a majority of the wealthiest and most enterprising Indians who have entered into and profited by the modern economic system, are people who are little tinctured with western civilization. Several of the bankers, capitalists, financiers, millowners and traders who have adopted the modern methods of making money and amassing wealth, are even noted for their strong orthodoxy in religious and social matters. The Marwaris, the Jains, the Bhatias, the Chettiars, the Khojas, the Memons and the Boras who are so

1 Read Ranade's Inaugural Address to the Indian Social Conference, 1899.

remarkable for their business enterprise, financial daring and acquisitiveness, have had little benefit of European education, and it is, in fact, notorious that the small section of the population who have imbibed western culture and are trying to assimilate it, have been, with the exception of the small community of the Parsees, overcrowding the learned and the clerical professions and have had practically no share in the acquisition of wealth by modern economic methods. It is thus the unwesternised, unenlightened and uncultured classes, fully under the influence of old religious ideas, social customs and prejudices that are in the front rank of commerce and industry, carried on on western lines, quite out of harmony with the supposed Hindu or Muslim ideals. It is the modern methods of the production, exchange and distribution of wealth that have imposed on the West a peculiar stamp of modern civilization, and the expansion of foreign trade, the rise of large-scale industries and the growth of crowded cities and a proletariat, prove that India can adopt those methods without doing injury to old Hindu or Muslim ideals. It is well-known that as a speculator in the produce or money market, the Indian is hard to beat for keenness of intellect and desire for personal gain. The emigration of Indian labourers and petty traders to the British and other colonies and the fight they have to put up for civic freedom and equality, are not without their significance. It will, therefore, be fair to conclude that Indian culture is not lacking in adaptability and the power of assimilation ; and if the people move slowly and cautiously, it is perhaps an advantage rather than a drawback.

24. Indian Spirituality[1] :—Wherein then lies Indian spirituality ? Is it a myth or a mystery and a riddle ? No. Indian spirituality is a systematized body of thought in which are co-ordinated metaphysical, ethical and sociological ideas with a view to the formulation and presentation of a harmonious view of life and an ideal and a standard for human conduct in its varied spheres. It is a synthesis which takes into account the manysidedness of man's

1 In previous editions we used the word "spiritualism" as a contrast to its opposite viz. "materialism." But in view of the fact that "spiritualism" has recently acquired a special meaning, not intended by us, viz a belief in spirits with which one can communicate in certain circumstances, we have now substituted "spirituality" for that word. "Spiritism" would perhaps be preferable as a philosophical term.

nature and his activities and lays stress on the ideal of human perfection to be achieved through the highest development of the faculties by the rational control and regulation of impulses and desires. Indian spirituality does not favour renunciation as such but seeks to rid material life of its grossness, to raise it to the heights of disinterested work and service and to make it compatible with the attainment of perfect happiness. This spirituality is in perfect consonance with modern ethical theories such as those developed by Hegel, Green, Caird and others. It pervades Indian works on Ethics and supplies a strong undercurrent for secular Indian literature, epics, poetry, drama, fiction and history. The country's laws, politics, social institutions and customs are based on a spiritual conception of human life. There is, of course, always a wide gulf between idealistic ethics and actual individual and social life ; but it is not possible to understand the latter without a reference to a people's philosophy of conduct. This accounts for the difficulty experienced in comprehending the true nature of Indian civilization. When western students first applied themselves to an inquiry into the Indian systems of thought and life, they were struck by the strange theories and practices of the people. Some were perplexed by them, others condemned them as low superstitions and a few were lost in admiration for the culture and the spirituality of the country.

It must be stated here that since the dawn of civilization, there has existed in India a powerful school of thought which makes renunciation the only means of attaining the highest bliss, and it has exercised a strong influence on the popular mind. According to this philosophy, the absolute and the universal self is the only reality, wealth and all other affairs pertaining to this world are an illusion, man is unhappy because he is absorbed in the unrealities of mundane life, and therefore, happiness can come only through self-realization achieved by means of the suppression of egoism and desires.[1] The captivating completeness and grandeur of this metaphysics propounded in the Upanishads and elaborated and popu-

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1 "It follows, therefore, that Hindu morality primarily aimed at the autonomy of the individual, i. e. at making him self-sufficient, self-dependent and free from all external bonds, physical and social. This is the underlying purport of the ascetic virtues of steadfastness, application, repression and self-restraint"— S. K. Maitra : The Ethics of the Hindus.

larised by Shankaracharya did not, however, obviate the necessity of simultaneously building up systems of ethical, sociological and political thought for dealing with problems with which man is confronted in his everyday life. Even modern ethics has to seek the assistance of philosophy and metaphysics for determining the standard of moral conduct, and the utilitarian school is constrained to adopt universal good or happiness as its criterion. Indian moralists and law-givers took the 'self-realization' of metaphysics as the basis and the ideal of their systems, and as practical men, concerned with the conservation and progress of the community, interpreted renunciation and asceticism not as elimination of sensibility and cessation from action but as deliberate rational control of egoism and desire. They recognize two kinds of duties, viz, those that relate to one's station in life and those which have no such limits and cover humanity as a whole.[1] Renunciation, further, is not intended for all and can be reached only through a process of education imparted by the ordinary life of a house-holder and a citizen virtuously lived. This progressive realization of the pure spiritual life and the harmonising of egoism and altruism constitute the essence of Hindu spirituality which is in complete accord with the latest developments of thought in the west. *It is the failure to understand and to realise in practice the* spirit of reconciliation underlying the Dharma or ethical dictates, which has brought about the stagnant condition of Indian civilization and has made social and economic readjustment difficult of achievement.

25. Indian Sociology :—A review of the history of sociological thought and institutions in India will illustrate the significance of Hindu spirituality. The Vedas bespeak a vigorous race *of Aryan immigrants and settlers occupying the north-western and* northern parts of India and evincing a lively desire to possess the good things of this world and a keen enjoyment of material pleasures. They pray to the gods for wealth and progeny, implore their assistance against worldly enemies and, in the beginning, have no caste barriers perpetuating social divisions and fixing economic functions on the basis of birth. Their elaborate system of sacrifices and ritual caused a revulsion of feeling and created a protestant school of thought represented by the philosophy of the

1 वर्णाश्रमधर्म and साधारणधर्म or विशेषधर्म and सामान्यधर्म,

Upanishads which deprecated the daily routine of Vedic worship and household duties as a means to eternal bliss. Buddhism and Jainism were revolts against the Vedic religion and brought about a schism in the Aryan faith, carrying further the movement in favour of renunciation and asceticism.[1] With the spread of the protestant philosophy, a radical change of the entire outlook on life took place in India and 'the strong love of the active virtues of fighting and hunting, chivalrous regard for women and the enjoyment of the pleasures of life generally, gave way to a philosophy which regarded life and being itself as a pain and calamity, the bustle of the arts of peace and war as unrelieved weeping and lamentation'.[2] After the decline of Buddhism and the rehabilitation of the Vedic religion, the philosophy of renunciation continued to be preached and believed in with unabated faith, but the material wants of life were insistent and irrepressible and demanded satisfaction. They were provided for by the promotion of various arts and sciences; and principles and directions in regard to them are embodied in Smrities or Dharma Shastras like those of Manu and Yadnavalkya, in works on ethics, pre-eminent among them being the Bhagvadgita, in Niti Shastras like those of Shukracharya and Kamandaka and in Arthashastras represented by the work of Kautilya. The importance and the authority of the Shruties being paramount, the attainment of the highest spiritual bliss was never lost sight of by any thinker or writer; and in dealing with the multifarious activities of man as a member of society—his position as a citizen and a producer and consumer of wealth—and in the discussion of different sciences, arts and philosophies, therefore, they demonstrated and preserved a complete harmony of different social interests.[3] The Hindu goal of life is comprehensive and is fourfold[4] viz. duty, wealth, desire or pleasure and emancipation, and

1 The subject of Indian ethics and metaphysics has been admirably dealt with in Tilak's Gita Rahasya, and a reference to it, while on this subject, will prove highly useful to the reader.

2 Ranade:—Miscellaneous Writings.

3 "The Ethics of the Hindus is based on a three-fold scheme of the spiritual life comprising the stages of sociality, subjective morality and the life absolute and transcendental. Hindu ethics is thus social ethics and psychological ethics and culminates in the philosophy of the Absolute which is the consummation of the spiritual life."—S. K. Maitra: The Ethics of the Hindus.

4 धर्म, अर्थ, काम and मोक्ष.

economic good finds an important and an honourable place in its attainment.[1]

The defence of Aryan civilization and the maintenance of social organization was a subject of momentous interest to thinkers and statesmen during centuries of Indian history, in the face of the religious, political and social upheavals they had to tackle. The keeping off of invaders, the assimilation of different races, the distribution of the population into classes, the assignment to them of economic functions, the determination of legal rights and obligations, the perfection of the technique of various arts, crafts and professions and the elaboration of the details of administration, therefore, constituted the varied subject matter of discussion and regulation. Hence the number of sciences which grew up and the systematic ordering of communal and individual life that was attempted. Sociological questions were actively debated, treatises were written on a variety of topics, and systems and schools of thought came to be founded, not unlike those of modern times. The Smrities or Dharma Shastras are essentially sociological works and cover the field of practical ethics, jurisprudence and the administration of law. The Niti Ṣhastras are devoted to the practical aspects of sociology. The author of Shukra Niti[2], for instance, speaks of Niti Shastra as the spring of virtue, wealth, enjoyment and salvation, thus demonstrating the harmony of the economic, ethical and the spiritual sides of humanity by treating them synthetically. He distinguishes Niti from other Shastras (which specialize in certain departments of human activities) as being useful to all and being the means, in all cases, for the preservation of human society. He tries to bring out the importance of sociology by referring to grammar, logic and the Vedanta philosophy and asking if these specialized sciences were of any avail to persons following the ordinary avocations of life and in supplying them with the necessary skill and intelligence.

The comprehensive view of social organization, its ultimate aim and its functioning indicated above, needs emphasis and must be

1 Comp. "विद्या ददाति विनयम्, विनयात् याति पात्रताम्। पात्रत्वाद्धनमाप्नोति, धनाद्धर्मं, ततः सुखम्॥.

2 "सर्वलोकव्यवहारस्थितिर्नीत्या विना नहि"।
"सर्वोपजीवकं लोकस्थितिकृन्नीतिशास्त्रकम्"। —Shukra Niti, I. 5, 11.

considered apart from the particular social institutions which were regarded as suitable under certain conditions. All the social sciences of India are based on the idea of the supreme necessity of maintaining the stability and equilibrium of the community. They all express a sense of horror at the danger of anarchy and social chaos. The maintenance of the fourfold division of classes and a strict observance of the regulations relating to the four stages of human life, are the primary objects of Indian ethics, jurisprudence and politics. The Bhagvadgita, which advocates a life of active virtue in preference to renunciation,[1] takes the same view and it is likewise supported in the Arthashastra of Chanakya. The latter maintains[2] that there are four sciences, viz. Anvikshaki (comprising the philosophy of Sankhya, Yoga and Lokayata), the triple Vedas (trayi), Varta (agriculture, cattle-breeding and trade), and Danda-Niti (science of government). He assigns the foremost place to Anvikshaki as being the most beneficial to the world as it keeps the mind steady and firm in weal and woe alike and bestows excellence of foresight, speech and action, and according to him, righteous and unrighteous acts are learnt from the triple Vedas, wealth and non-wealth from Varta, and the expedient and inexpedient as well as potency and impotency from the science of government.[3] It should be noted that in Hindu writings the moral standard is variously held to lie in social stability (Lokasthiti), realization of the social purpose (Lokasiddhi), social good (Loka-shreya) or preservation of living beings (Lokapalana). The hedonism or the standard of pleasure

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1 "न कर्मणामनारंभान्नैष्कर्म्यं पुरुषोऽश्नुते ।
नच संन्यसनादेव सिद्धिं समधिगच्छति" ॥—Gita III. 4.
"संन्यासः कर्मयोगश्च निःश्रेयसकरावुभौ ।
तयोस्तु कर्मसंन्यासात्कर्मयोगो विशिष्यते" ॥—Gita V. 2.

2 "आन्वीक्षकी त्रयी वार्ता दण्डनीतिश्चेति विद्याः ।
धर्माधर्मौ त्रय्याम् । अर्थानर्थौ वार्तायाम् । नयानयौ दण्डनीत्यां बलाबले चैतासां हेतुभिरन्वीक्षमाणा लोकस्योपकरोति, व्यसनेऽभ्युदये च बुद्धिमवस्थापयति प्रज्ञावाक्यक्रियावैशारद्यं च करोति—

प्रदीपस्सर्वविद्यानामुपायस्सर्वकर्मणाम् ।
आश्रयस्सर्वधर्माणां शश्वदान्वीक्षकी मता ॥—Arthashastra.

3 Shama Shastri's Translation.

preached by the Charvakas was universally condemned and the standard of self-realization was specially favoured.

26. Economic Motive and Activity :—Indian thinkers had to assume, as will be clear from the above, that this world and human life with its extreme complexity, was an inevitable fact and that they could only make the most of it in order to win happiness from it. There is no escape from sensibility and desire which motive economic actions, but reason can discipline and regulate them so as to make happiness independent of their satisfaction. The "economic man," a creation of classical economists, it is now generally agreed, was a caricature; the idea needed a corrective and it is being supplied by the increasing weight which there is a welcome tendency to give to the non-material side of human nature. It is being recognized more and more that welfare does not increase *pari passu* with increasing income, and that consisting as it does of states of consciousness, it may be and is independent of the acquisition of the latter. Subject to this qualification, however, Economics has to assume that a feeling of pleasure attends on the satisfaction of material wants and that consequently prompts economic activity. According to Hindu psychologists, human action proceeds from desire for pleasure or happiness and aversion towards pain; and the impulses are of a lower and a higher order. The Bhagvadgita[1] speaks of material desires and acts as part and parcel of human nature, on which depends the very existence of man and urges that the suppression of sensibility being impossible, it is their control that should be aimed at. The connection between economic wants and the effort to satisfy them is recognized by Manu[2] and other Smriti writers[3]. They have stated that expectation of recompense is the motive to labour. Manu says that "to act for rewards is not laudable, yet an exemption from that desire is not (to be found) in this (world): for on that desire is grounded the study of the Veda and the performance of the

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1 **Bhagvadgita III. 5-9.**

2 अकामस्य क्रिया काचित् दृश्यते नेह कर्हिचित् ।
यद्यद्धि कुरुते किंचित्तत्कामस्य चेष्टितम् ॥ ४ ॥—**Manu II. 4.**

3 न क्लेशेन विना द्रव्यं न द्रव्येण विना क्रिया ।
क्रियाहीने न धर्मः स्याद्धर्महीने कुतः सुखम् ॥

—**Daksha Smriti III. 23.**

actions prescribed by the Veda." Another writer[1] says that effort to procure wealth is necessary in view of the fact that happiness depends upon the performance of virtuous acts and the latter are impossible without wealth.

Modern ethics has come to admit that the noblest ideal of man should consist in the perfection of all his powers and in subordinating the lower desires and functions to the higher. The latest development of economic thought is also proceeding in the same direction and it is admitted that "the pursuit of wealth, like the use of force, is in itself neither good nor bad; and whether or not it suffers from materialism, depends upon the origin of the wealth, the methods by which it is produced, the manner in which it is employed, and by whom it is used." [2] This is quite in keeping with the central truth taught by the Bhagvadgita which insists upon each person performing his economic function as a duty towards the community without thinking of reward or satisfaction, in an altogether disinterested spirit. Even such persons as, by a long course of training, have disciplined their reasoning faculty and have risen above material pleasure and pain, are expected by the Gita to continue to do their round of duties 'in order to set an example to common people and to help them in their progress.[3] The standard of the material and spiritual living of the mass of mankind is so low that wants of different kinds are bound to spur man on to activity in an unlimited field; and the objection that, with the weakening of the belief that increase of wealth brings increase of welfare, the incentive to progress will disappear, is not sound. From the purely economic point of view, besides, the possession of a disciplined reason which will not be elated with success and depressed by defeat, will be an asset of great stimulating value. What

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1 धनमूलाः क्रियाः सर्वा यत्नस्तस्यार्जने मतः ।
रक्षणं वर्धनं भोग इति तस्य विधिः क्रमात् ॥—
Nārada Smriti. III. 45-46.

2 William A. Robson : The Relation of Wealth to Welfare.

3 Bhagvadgita III. 20-26. The Hindu Smritis which had to deal with the everyday needs of the people, echo the same spirit of reconciliation of the spiritual and the material, e. g.

इह चामुत्र वा काम्यं प्रवृत्तं कर्म कीर्त्यते ।
निष्कामं ज्ञानपूर्वं तु निवृत्तं उपदिश्यते ॥—Manu XII. 89.

is wrong with the western world to-day is the increasing opposition between egoistic and altruistic action.[1] It is the failure of the increasing acquisition of wealth to make a corresponding contribution to welfare and therefore of 'the ambition to be rich to provide a sufficient incentive for the carrying out of activities highly necessary to society.' While a widening gulf appears to be fixed between common material life and religion in the West, individual interest and universal sympathy have been systematically reconciled in India for ages past.

27. Indian Economics:—It will be convenient if we now sum up the discussion of the foregoing sections and indicate their bearing on the issues raised in the two preceding chapters. It must be accepted as a fact that India has been thrown into the vortex of world changes; and her people must adjust themselves to the surrounding conditions instead of quarrelling with them. Western influences are actively at work in the country and are steadily penetrating to the mass of the population through the intelligentsia. The materialistic civilization of the West, armed with the strength supplied by the progress of the physical sciences, has produced a disturbing and disquieting effect upon the static condition of dormant Indian culture which is, however, too deep-rooted and elastic to be wiped out or transformed out of all recognition. The rapid and growing exchange of commodities, turned out on the principle of mass production within and outside the country, is having far-reaching effects upon the characteristic Indian organization of castes, communities and corporations, and it has created difficult problems relating to employment, prices, wages, profits and consumption. The new economic system which is taking shape in the country, cuts right across the social organization of the people and has to be fitted into it with suitable modifications. The task of economic

1 "Sympathy or altruism pushed to an extreme involves the destruction of self and therefore the death of society: self-interest or egoism pushed to an extreme means the destruction of others and therefore likewise the death of society. Social life can endure only through a balancing of these two principles, each reinforced by the other. Since *economics, like ethics, is primarily a social science* the true economic action must in the long run be an ethical action. An individual may pursue selfish *economic* ends, and may augment his own wealth at the cost of moral progress; but he is then subordinating public to private considerations."—Seligman: Principles of Economics.

thinkers is, therefore, defined by the needs of the situation thus created, and the future of India will depend on how solutions are found and are given effect to.

It is quite clear that India can not be allowed to drift into a materialistic system which the West has found to be productive of discord and discontent and that the essentials of her own culture must be safeguarded by deliberate national action just as western countries are defending their standard of civilization against deterioration threatened by the competition of coloured races. It is equally clear, however, that Indian culture can live and live worthily only if it assimilates the progressive spirit of the West and emulates its enthusiasm for knowledge, scientific advancement and improvement of organizing capacity. Indian culture is not a curiosity to be kept in a show case in the museum of the world's civilizations; it must be made a living and growing force which will animate the progress of the country towards its destiny. It is futile, for instance, to expect that the Hindu system of castes should remain intact in view of the large breaches which have already been made into its walls by sheer economic necessity and by the influence of the modern democratic ideal. Are we to condemn large masses of people to a life of servitude or degrading drudgery on the score of their inferior birth and are we to respect a life of renunciation or mendicancy as such as being superior? Can it be urged that it is rank materialism for the crores of degraded people in Hindu society to strive to obtain more and better food and more and better clothing and to secure decent and sanitary houses to live in? Will an orthodox Hindu, relying on the text of Manu still insist upon the untouchable classes continuing in their depressed, dirty and dehumanised state?[1]

The exclusion of the untouchables and outcastes from opportunities to earn a decent, honest livelihood, the secluded and helpless state of womanhood, the prevalence of licensed mendicancy and asceticism which no true spirituality has ever sanctioned and immobility and fatalism rooted in the hereditary vocations are,

1 'चंडालश्वपचानां तु बहिर्ग्रामात्प्रतिश्रयः।
अपपात्राश्च कर्तव्या धनमेषां श्वगर्दभम्॥५१॥
वासांसि मृतचैलानि भिन्नभांडेषु भोजनम्।
कार्ष्णायसमलंकारः परिव्रज्या च नित्यशः॥५२॥' Manu: X, 46–56.

Here we have a big deficiency of life's necessaries; there, they have a large surplus available. The economic dislocation caused by the War in Europe, has thrown the contrast into bold relief. The artificial prosperity of war time was there succeeded by a reaction which made economic conditions much worse than in pre-war days. Owing to general exhaustion, the demand for British goods, for instance, in other countries, was reduced and one important avenue of wealth-creation was thereby blocked. England's productive capacity had increased while the consuming power of her customers declined. The burden of taxation and of public debt was heavy and industrial costs were high. There was a good deal of unemployment, the nation lived upon capital, income was reduced and the high standard of living was threatened. Strenuous efforts have, therefore, been made to encourage export trade and to secure outside markets. Increased consumption has been declared to be the most urgent need of Europe and this phase of economic development throws very interesting light upon the normal position in India where wealth-creation is inadequate.[1] There is chronic unemployment or under-employment in India, the productive capacity of the people is low and what power of production they possess, is not being fully utilized. Population is steadily increasing and ideas of the standard of living are undergoing change in the meanwhile. This has produced a wide gap between the necessary consumption and the actual production of wealth.

Glaring inequalities in wealth-distribution and the feeling of injustice caused thereby in the working classes, is the principal cause of labour discontent, industrial conflict and the growth of socialism in the West. The remedies contemplated for the correction of the inequalities are calculated to exert a far-reaching effect upon the methods and organization of production and, therefore, upon the whole social structure. Distribution of wealth in India has not been and is not, of course, ideal, and will demand greater attention with the rapid development of large-scale production. Wages of labour must certainly rise and the working classes in India are, in fact, becoming conscious of the improvement of their

1 It cannot be said of India as it has been said of England (H. R. Hodges: Economic Conditions: 1815–1914.) that 'the past has been devoted to the accumulation of wealth, the future is to its more equal distribution.'

economic condition which they can legitimately claim. But in order that the share of the workers of different grades and kinds may be increased, the nation's productive capacity must, in the first place, be considerably augmented and it must keep pace with the steady growth of population and the requirements of a higher standard of living. By what means this end shall be attained is, therefore, the important problem which demands solution. The present state with regard to the standard of living of the bulk of the people in India is admittedly unsatisfactory. It is not factory workers and unskilled labourers alone whose condition demands attention; the lot of small cultivators and craftsmen is still worse. Their homes, their food, their clothing, their health, their education, are all what they should not be and need radical improvement. There is not enough wealth in the country, even in the form of necessaries, to go round and even a redistribution, on whatever principle it may be attempted, is not likely to make an appreciable addition to individual income and comfort. This is a consideration which ought to be given due weight by those thinkers in India who are turning to socialism and to equal distribution for an effective remedy against the economic ills from which the country is suffering. The wretchedness, squalor, poverty and depressed mentality which prevail in the country, require wealth-production on a larger scale so that the elementary wants of the people may be satisfied and opportunity may be provided for an improvement of the standard of living.[1]

30. Physical Features:—Man procures food, clothing, shelter and conventional necessaries by exerting his physical and mental powers on material furnished by nature. The more efficient the instruments and methods he can employ, the more easy and productive is his effort at wealth-creation. Man's progress lies in his effective utilization of the means furnished by and wrung out of nature by his foresight, ingenuity, skill and industry. Land, labour and capital are the three essentials of production, and to increase their supply and to make them more efficient, is to provide for a larger pro-

1 "The first consideration is that India is a very poor country. The people as a whole want a large increase in wealth to satisfy their most urgent wants: many of them want more nourishing food, better clothes, better houses, better health, better education, to name only a few of these wants; and any system of production that will give a large increase of wealth is desirable because it will give a chance of satisfying some of these most urgent wants."—W. H. Moreland: An Introduction to Economics.

duction of wealth. In this chapter, we propose to deal with the first of these factors of production, viz. land, which means not only the crust of earth lying upon the surface of our globe, but all natural phenomena and surroundings like the climate, the heat and the cold, the rainfall, the seas, harbours and the coasts, the minerals in the bowels of the earth, forests, rivers, hills, valleys, plains and lakes &c., which all play and are made to play a part in the production of wealth. Civilized man conquers the forces of nature and bends them to his use. But individual and national character is itself largely shaped by man's natural environments, particularly in the earlier stages of his progress. With the different branches of the human race, are associated certain exclusive characteristics, and the Aryans, the Semites, the Turkomans, the Mongolians are thus distinguished from one another. Racial and cultural unity is, of course, not to be expected in India any more than in Europe. But the Aryan stock dominates the Indian population, and the other races have been more or less completely brought into the pale of Aryan civilization. There are still numerous tribes and castes in India's nooks and corners and in border lands which are in a primitive and semi-civilized state; and the Nagas, the Mundas, the Santals, the Gonds, the Bhils, the Todas are slowly coming into the economic and social structure of the country.

In the last Chapter we discussed the relation between the material development and the religious and social ideas of the Indian people, and without attempting here to interpret their political social and economic history in the light of the country's natural characteristics, we may generally observe that the latter have visibly stamped themselves on the life of the Indian communities and contributed to the moulding of their destinies. The intimate connection between the natural features and peculiarities of a country, and the civilization of the people inhabiting it, is too well-known to need more than a passing reference, and the history of Greece and Rome in ancient times and of England, Holland and the United States of America in our own, brings it out with remarkable clearness. The insular position of England, the nature of its coast line, the location of its coal and iron deposits and its climate have very largely determined the destiny of its people. The vast dimensions of this country, its mountains and rivers, its hot, moist and cold climates and its partly continental and partly peninsular character

have had similar effects upon the Indian population. It is not to be wondered at, in the circumstances, that provinces and even districts display a striking variety in economic conditions, physical and mental constitutions, social manners and other characteristics of the people.[1]

The India with which we have to deal as an economic unit is a sub-continent being hammered into a nation and is, therefore, a subject of study of unique interest. It has both a diversity and a unity peculiarly its own. With the North-West Frontier Province on one side and Burma on another, it is like a federation of peoples whose natural and artificial boundaries are being levelled down by the unifying process of modern civilization and of one common law and government. The northern portion of India is continental, being a part of the continent of Asia while the southern half is peninsular, being surrounded by the sea on all sides except the north. The former is in the temperate zone and the latter in the tropics. The greatest length of the country is nearly 2,000 miles and the greatest breadth about 2,500 miles. The land frontier is about 6,000 miles in length in all, and the coast line measures nearly 5,000 miles. India is fifteen times as large as the United Kingdom in size and equals in extent the whole of Europe with Russia taken out of it. The Himalayas on the north and the long coast line on the south, have been the impregnable defences of India; and the enemy could conquer the country only by breaking through these barriers. The political and the economic significance of the north-west frontier and the coast line, is as great to-day as in the past many centuries. Security of life and property, so essential to economic activities, was, for centuries, rendered impossible by the irruption of foreign invaders from the north-west. The coast, studded with numerous harbours, large and small, afforded the means of communication with the outside world, contributed to maritime, colonising and civilizing activities in the olden times and has now facilitated the establishment of the fateful contact with western nations. It is not difficult to explain the differences with regard to the ways of work and living which are to be observed among communities inhabiting, for instance, the Frontier Province, Burma, the coastal districts, the hilly tracts, the Gangetic plain, the Deccan plateau and the large port towns.

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1 J. T. Goodchild's *Geography and Man* may be read with interest and profit on this whole subject.

31. Striking Characteristics :—British India extends from E. long. 61°40′ in the extreme west to E. long. 101°15′ in the east and from N. lat. 37° in the north to N. lat. 8° in the south. It falls into four well-marked divisions : (1) the big mountain ranges in the north-west, the north and the north-east ; (2) the extensive plains dominated by these mountains and fed by the large rivers issuing from them ; (3) the table land of the Deccan ; and (4) the long strips of land lying to its west and east on the Malabar and the Coromandal coasts. The Himalayas play an important part in determining economic conditions as they regulate the rains, the winds, the heat, the cold and the moisture on which depend the food supply and the industries of the people. The historic plain of Hindustan is watered by the Indus, the Ganges, the Jumna and the Brahmaputra and is enriched by the fertile alluvial soil washed down by them. The eastern portion of this plain has the heaviest rainfall which goes on decreasing towards the west till in the south of the Punjab, there is scarcely any rain though the soil is fertile and needs water for producing rich crops. This plain, as well as that in the south, having the advantage of large rivers and of subsoil water tapped by means of wells, contains very dense populations compared with other parts of the country. On account of its large rivers and rich soil, the plain of northern India became the home of Aryan civilization and the birthplace of religions and empires.

The Vindhia mountains and the system of hills connected with them, separate northern from southern India with its extensive Deccan plateau. From them run, towards the south and parallel with the sea, the ranges of the western and the eastern ghats, the former cutting off a narrow strip of territory from the rest of the peninsula and the latter leaving a broad piece of land irrigated by rivers like the Mahanadi, the Godavari, the Krishna and the Kaveri and thus capable of the growth of material civilization. "The Deccan rivers, like most rivers in plateau regions, flow in deep gorges, and are, therefore, of little value for either irrigation or communication and it will be seen that there is no town of any size or importance on any of the Deccan rivers.'[1] The Deccan table land slopes from the west to the east, the mountains in the former being higher than in the latter. The western ghats receive in copious quantities the benefit of the south-west monsoon but they prevent

1 C. B. Thurston : "Economic Geography of the British Empire."

it from being shared in a generous measure, by the plains lying to the east. The big rivers of central and southern Deccan spread their silt as they flow to the east and fall into the Bay of Bengal and thus enrich the coastal plain. These rivers, whose water is wasted into the sea, are blocked in convenient places and are, in this way, utilised for irrigational purposes by the ingenuity and labour of man. The Godavari, the Krishna and the Kaveri have their currents dammed and partially diverted for productive purposes to the great relief of the agricultural industry. The western ghats produced the struggling, hardy, simple race of the Marathas and the eastern ghats provided centres for wealthy kingdoms and empires. Burma appears, as an Indian province, to lead a life of its own in a corner of the sub-continent, cut off from the influences which shape the history of the nation. It is a country full of hills, rivers and forests, and nature seems to rule there in all her grandeur. Lower Burma partakes of the physical features of Lower Bengal, and upper Burma is hilly and less fertile. The forest and the mineral wealth of Burma is, however, immense and that picturesque country is full of great economic possibilities. This fact has a vital economic and political bearing, as recent events have shown, on the future of the commonwealth of India.

32. Climate, Soils and Crops:—Apart from the racial characteristics which distinguish the people inhabiting the different parts of the country, varieties of climate and soil determine their productive activities, staple food crops, clothing and housing, in short, their manner and standard of living. There are, in India, great differences of climate, dryness and moisture, heat and cold. Extremes of temperature in the northern parts are striking: the summer bringing the greatest heat and the winter most intense cold. This variation is on a smaller scale in the southern parts, where there is practically no cold season; and in winter, only the normal heat is mitigated. Rainfall likewise exhibits similar variations. The fall of rain depends on the movements of the winds and the temperature and the level of land. Monsoon winds blowing from the Arabian Sea over the south-western parts of the peninsula are obstructed by the ghats before they can reach Sind and Rajputana or can drop any large quantity of moisture in the interior of the country. Agriculture in Sind has to rely almost entirely on the waters of the Indus, and the significance of the Sukkur Barrage and the Indus floods

which devastated parts of the Punjab and Sind in the rainy season of 1929 can not be mistaken. This wet season lasts from June to September. The other current blows over the Bay of Bengal into Assam, Burma and Bengal and proceeds to the extreme north, giving rain to the Gangetic plain. The Madras Presidency receives its moisture from the north-east mousoon in the closing months of the year, and this rainy season is comparatively shorter. In northern and western India, this becomes the winter rain which gives crops of the second agricultural season.

It will have been observed that there is no uniformity or evenness in the fall of rain in India, the average for the whole country being about 45 inches, and Sind for instance, having little or no precipitation while Cherra Punji between Sylhet and Assam receiving as much as 600 inches in the year. Then again, the rainfall is concentrated in a brief season, and its failure at the proper time means the ruin of the agricultural industry. The far-reaching effect of the peculiarities of the rainfall, can be traced in the *production, exchange, distribution and consumption of* agricultural wealth all over India. Hence the need in several portions of the country of storage works and irrigational canals. Artificial irrigation is a dire necessity in the dry portions of the Punjab, Sind, the Deccan plateau and eastern parts of the Madras Presidency. There are two crops taken out of the soil in the two agricultural seasons viz. the Kharif and the Rabi, the first being harvested in autumn and the second in the spring. The natural features described above, determine the kinds of the crops and the methods by which they are raised. Agricultural production has, therefore, become specialized to a considerable extent in the different parts of the country.

Wheat, which requires a cool climate, is the staple crop of north-western India, and rice is grown in the warmer and the damper parts of the country like Bengal and South India where there is an ample supply of water, and the millets and other grains are produced almost everywhere. Different climates and soils are congenial to the production of different crops and thus industries like those of jute, cotton, indigo, tea, sugar &c. have been localized in certain provinces. Rice cultivation predominates in Bengal, Bihar and Orissa, Madras and Burma. In wheat production, the Punjab occupies the place of honour, the United Provinces, the Central Provinces

and Bombay coming after it at a long distance. Bombay and Madras are the principal producers of Jawar and Bajri. Madras, the United Provinces and the Central Provinces are the principal producers of oil seeds. The United Provinces have the largest area under sugarcane and therefore a flourishing sugar industry, while the other Provinces have just enough cane cultivation to yield them the raw sugar required, refined sugar being imported from outside. Bombay, the Berars, Madras and the Punjab have practically a monopoly of cotton production, and Bombay leads in cotton manufacture. Jute cultivation and Jute factories are the monopoly of Bengal. Indigo cultivation is shared between Bihar and Madras, and dye materials are contributed mainly by Bombay. Tea is grown in Assam and Bengal; coffee in Madras and Coorg.

The variety of soils in India must also be noticed. As the report of the Royal Commission on Agriculture[1] points out, though "nowhere in India does the traveller pass over the rapid succession of geological formations he may meet in the course of a journey across England" and the "geological structure of the country and the character of the climate over wide areas thus combine to produce an appearance of uniformity in its soils", the appearances are deceptive and wherever a careful classification of soils has been carried out from the agricultural point of view, "pronounced variations *in quality have been detected not only in the uplands but in the* plains". The depth and the texture of the soil and its mineral and chemical composition have a great influence on its productivity, and its character is also affected by contact with water. The predominant types of soil found associated with the main geological series, are (1) the red soils derived from the rocks of the archaean system, (2) the black cotton or *regur* soils which are usually associated with the middle period traps of the Deccan but are also found in Madras, (3) the recent alluvium which is specially developed in the plains of northern India but is of frequent occurrence elsewhere and (4) the lateritic soils which form a belt around the peninsula and extend through east Bengal into Assam and Burma.[2] The accompanying tables show the distribution of the different crops over various Provinces in India.

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1 Chapter IV.

2 Paragraph 71 of the Report of Commission on Agriculture.

Areas under different crops (In Lakhs of Acres)

Provinces.	Rice.	Wheat.	Barley.	Jawar or Cholam.	Bajra or Cambu.	Ragi or Marua.	Maize.	Gram (pulse)	Other food grains & pulses.	Total food grains & pulses.
Bengal ...	218·3	1·2	·8	·03	·02	·5	·9	1·4	10·5	233·4
Madras ...	112·7	·8	0·2	55·7	31·9	24·9	1·0	1·1	67·3	295·2
Bombay { Pres. ...	19·5	15·0	·2	80·5	50·0	6·2	2·0	4·8	25·1	203·6
Bombay { Sind ...	16·4	4·3	·1	5·7	11·0	...	·02	1·7	2·6	35·1
United Provinces { Agra.	43·3	50·2	32·0	22·9	20·2	1·5	13·2	45·3	46·2	277·1
United Provinces { Oudh.	35·12	18·4	11·5	3·8	4·3	·3	7·5	15·2	23·5	110·2
Bihar and Orissa ...	152·2	11·3	13·7	·8	·7	·83	18·0	14·8	51·5	271·5
Punjab ...	8·2	87·8	11·1	12·1	33·2	·2	12·1	51	15·9	231·3
Burma ...	110·0	6	...	8·6	...	...	2·3	1·6	2·7	126·1
Central Provinces	50·3	1·6	·1	24·1	·4	1·2	1·5	8·4	41·2	149·4
Berar ...	·3	...	...	25·6	2·3	·01	·03	·5	5·9	35·5
Assam ...	45·1	9·3	...	...	...	...	...	...	1·8	46·9
North-west Frontier Province ...	·2	·1	2·9	1·0	2·6	...	4·6	2·6	·8	24·8
Ajmer-Marwara ...	...	·5	·5	·5	·3	...	·7	·01	·3	2·4
Delhi ...	...	...	·19	·3	·6	...	0·2	1·0	·08	2·8
Coorg ...	·8	...	...	...	...	·04	...	...	·02	·9
Manpur Pargana ...	...	·01	...	·02	...	...	·01	...	...	·06
Total ...	798·9	224·0	73·5	242·1	159·0	42·1	63·3	150·0	296·1	2047·9

Areas under different crops (In Lakhs of Acres)

Provinces.		Linseed.	Sesamum (til or jinjili.)	Rape and Mustard.	Ground-nut.	Other oil seeds.	Total oil seeds.	Condiments and spices.	Sugar-cane.	Sugar-other.
Bengal	...	1·3	2·0	8·9	...	·3	12·6	1·6	2·2	·5
Madras	...	·07	7·7	·3	14·5	1·4	33·7	7·0	1·1	·7
Bombay { Presidency	...	1·1	2·2	·1	2·7	1·7	9·0	1·8	·5	·03
Bombay { Sind	...	...	·3	3·2	...	·05	3·7	·05	·02	...
United Provinces } Agra	...	1·9	2·2	1·0	·01	·1	5·4	·6	9·5	...
United Provinces } Oudh	...	·8	·2	·5	·06	...	1·7	·1	2·0	...
Bihar and Orissa	...	7·0	1·8	7·8	...	2·2	20·1	·6	3·2	...
Punjab	...	·3	1·5	14·6	...	·07	16·6	·2	3·7	·2
Burma	...	...	10·5	·04	3,0	·01	13·8	·8	·3	...
Central Provinces	...	7·4	7·0	·3	·1	2·5	17·9	·5	·1	...
Berar	...	·01	·6	...	·05	·3	1·3	·2	...	...
Assam	...	·01	·1	3·7	...	...	3.3	...	·4	...
North-west Frontier Province	...	...	0·3	1·9	...	...	1·9	...	·3	...
Ajmer-Merwara	...	...	·1	...	...	...	1·6	...	...	...
Delhi	...	...	...	·06	...	...	1·0	0·3	...	...
Coorg	...	...	...	...	...	...	...	0·4	...	...
Manpur Pargana	...	...	...	...	...	...	...	...	...	...
Total	...	20·5	37·0	42·3	20·6	9·6	141·9	14·1	23·6	1·5

Areas under different crops (In Lakhs of Acres).

Provinces.		Cotton.	Jute.	Other fibres.	Total fibres.	Indigo.	Other dyes.	Opium.	Tea.	Coffee
Bengal	...	·4	13·1	·7	14·4	·1	...	...	1.7	·5
Madras	...	17·82	...	1·4	19·2	1·9	·02	...	·4	...
Bombay	Presidency ...	28·3	...	1·0	29·3	...	5·9	...	...	...
	Sind ...	1·4	...	1·3	1·4	·12	...	·5	...	...
United Provinces	Agra ...	7·5	...	·3	8·8	·4	...	·6	·06	...
	Oudh ...	·3	...	·3	·8	·01	...	...	...	...
Bihar and Orissa	...	·7	1·0	·4	2·2	3	...	·01	·02	...
Punjab	...	11·4	...	·01	11·9	·3	...	...	·09	...
Burma	...	3·2	...	·5	3·2	...	...	...	·5	...
Central Provinces	...	12·7	...	·4	...	...	...	...	...	...
Berar	...	31·3	...	...	13·2	...	...	...	...	...
Assam	...	·3	...	...	31·8	...	...	...	4·1	...
North-west Frontier Province	...	·1	·8		1·2	...	...	...	...	...
Ajmer-Merwara	...	·2	...	...	·1	...	...	...	...	...
Delhi	...	·01	...	...	·2	...	...	...	·01	...
Coorg	...	...	...	...	...	...	...	...	...	·4
Manpur Pargana	...	...	...	...	...	...	...	...	...	...
Total ...		116·6	15·0	6·8	138·5	3·2	5·2	1·2	7·1	·9

Areas under different crops (In Lakhs of Acres).

Provinces.		Tobacco.	Other drugs and narcotics	Fodder Crops.	Fruits & vegetables including root crops.	Miscellaneous crops. Food.	Miscellaneous crops. Non-food.	Total area sown.	Deduct area shown more than once.	Net area sown.
					6·7					
Bengal	...	2·9	·4	1·0	6·5	2·8	1·2	281·6	44·6	237.0
Madras	...	2·0	1·5	3·0	5·6	·4	1·6	375·6	45·2	230.4
Bombay { Presidency	...	1·0	·2	19·1	·5	·07	·05	275·9	7·3	268.6
Bombay { Sind	...	·1	·01	1·2	3·1	...	·3	43·9	3·3	40.3
United Provinces { Agra	...	·7	·01	10·8	1·2	·9	·06	321·9	55·9	266.0
United Provinces { Oudh	...	·1	...	1·7	7·2	·06	...	118·9	26·8	92.5
Bihar and Orissa	...	1·1	...	·3	2·6	5·8	3·7	315·9	62·6	253.8
Punjab	...	·9	·6	4·9	15·2	1·3	·02	310·2	50·2	259.6
Burma	...	·8	·02	2·1	1·0	·02	1·8	166·1	6·0	160.1
Central Provinces	...	·1	...	4·3	...	·01	...	186·9	20·0	166.9
Berar	...	·1	...	...	4·6	...	...	69·3	·3	68.9
Assam	...	·1	...	·9	·3	...	1·3	62·2	5·2	57.0
North-west Frontier Province	...	...	...	...	·5	·4	·01	28·7	4·5	24.1
Ajmer-Merwara	...	...	...	·1	·5	·05	·04	3·5	·5	2.9
Delhi	...	...	...	...	...	...	...	3·2	1·0	2.2
Coorg	...	...	...	...	...	...	...	1·4	·03	1.4
Manpur Pargana	...	...	...	...	...	...	...	·07	·03	0.6
Total	...	10	2·6	86·0	55·3	12·4	9·7	2565·8	333·9	2231·9

33. Forests:—Another valuable gift of nature consists of the forests with which a community may be favoured. They will have to be considered from different points of view : (1) the relation between forests and the quantity of rainfall and therefore the prosperity of the agricultural industry ; (2) their commercial value to owners and particularly to the State, as a source of revenue ; (3) their industrial importance, as supplying raw materials ; and (4) their relation to village economy. There are here various interests involved, which are in conflict. Villagers want cheap grass and fuel, industrialists need cheap raw materials and the State looks to the forests for growing revenue while it is likewise called upon to conserve them as a valuable national asset. In the earlier stages of civilization, man finds it necessary to destroy forests and clear the land for settlement and cultivation. This accomplished, it is to his interest that natural wealth in the form of woods, should be conserved and economically exploited. The history of India shows how the land was at one time covered with thick primeval forests and was gradually won over to civilization.[1] With the consciousness of the numerous uses to which forest products can be put and the growing depletion of the world's resources in this regard, the importance of forest conservation is coming to be recognised more and more keenly. India is not unfavourably situated in respect of this wealth abundantly planted by the hands of nature on its mountains and hills. Nature's endowments like forests can not, of course, be as generous in the India of to-day as they are in newly settled countries like Canada, for example. These resources are much more plentiful in the thinly-populated and the undeveloped parts of America, Africa and Asia than in India with a civilization more than three thousand years old. 'Mechanical' wood pulp which is consumed in enormous quantities in newspapers, therefore, comes from Scandinavia America and central Europe. The forest produce of this country is, however, rich and varied and its economic possibilities have fortunately begun to be realised.

Excellent qualities of timbers, fibres, grasses, distillation products, oil seeds, tans, dyes, gums, resins, rubber, bamboos, canes, drugs and spices are found in the Indian forests. At one time, no attention was paid to this valuable source of raw material and the forests were left to themselves to be destroyed or conserved. Dur-

1 Refer to the Ramayana and the Mahabharata.

ing the last sixty years, the State has steadily attended to the proper exploitation of the forests under its own control. It has now dawned upon all that they are not only an important source of revenue to the government but a great national economic asset, for the forests are calculated to supply valuable raw materials for various industries connected with the building of houses and ships, furniture, wood pulp, paper, tanning materials, matches, resin, turpentine &c. Indian forests were extensively drawn upon for furnishing war material, and the conviction was then brought home to the official and the public mind that "the development of the economic resources of the Government Forests has not yet received the attention which it deserves and which it will certainly receive in the very near future".[1] The Forest Research Institute at Dehra Dun is doing useful work of research and experimentation and the provincial forest experts are engaged in working out schemes for the conservation and development of forest wealth by scientific means.

Nature's gifts like forests and minerals can be of substantial use to man only if they are exploited with knowledge, forethought and care. We are here concerned to show the economic possibilities as well as the size and the character of the forest resources of the country. It may, however, be remarked that forests have considerable influence on rainfall and the force of winds and the climate and therefore on the state of the agricultural industry. From this point of view also their economic importance is unmistakable. These resources may remain unexploited and will go to waste if their utility is not known, if facilities of transport are not available and if enterprise, capital and the other requisites of production are wanting. There are extensive forests in India which are not owned and managed by the State and are in private hands. Many Indian States are richly endowed in this respect and Mysore, Travancore come immediately to one's mind. Elsewhere in States' territory also they are, by no means, an unimportant asset. Government forests in British India are classed as "reserved," "protected" and "unclassed." Those of the first class are intended to be maintained permanently for the supply of timber, fuel and other produce, for the protection of water supply and similar other

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1 Indian Munitions Board Industrial Handbook, 1919.

purposes. Those of the second class may be in a state of transition to the first or may remain permanently in the same class. The unclassed forests are, unlike those of the other classes, allowed to be used by the public, subject to a few or no restrictions. Of about 2½ lakhs of square miles of forests under Government management, which is nearly 25 per cent. of the total area of British India, one lakh of miles are reserved, 8½ thousand are protected, and the remaining lakh and a half are unclassed. The following table shows the area under forests in the different Provinces:—

Province.	Total area sq. miles	Forest area in sq. miles			Proportion of forests to total area.
		Reserved	Protected	Unclassed	
Bengal ...	78,835	4,888	1,711	4,030	13·5
Madras ...	1,42,218	18,712	...	682	1·36
Bombay ...	1,23,164	12,100	487	...	10·2
U. P. ...	1,06,725	6,311	1,101	61	7
Bihar & Orissa ...	82,484	1,747	1,089	...	3·4
Punjab ...	96,650	2,809	4,169	767	7·3
Burma ...	2,26,911	29,336	...	1,16,829	64·4
C. P. & Berar ...	99,468	19,645	...	...	19·7
Assam ...	48,954	5,495	...	16,309	44·5
N. W. Fr. P. ...	13,184	236	...	...	1·8
Ajmer ...	2,767	142	...	...	5·1
Baluchistan ...	54,228	313	...	472	1·4
Coorg ...	1,582	520	...	...	32·9
Andamans ...	3,143	85	...	2,122	70·2
Total ...	10,80,794	1,01,639	8,557	1,41,272	23·3

34. Their Economic Value:—The recognition of the great importance of forests is reflected in the recent development of forestry and sylviculture and the systematic measures that are being taken for the preservation, protection and artificial growth of forests in all countries.[1] The varied produce of Indian forests has been used from time immemorial for different purposes according to the prevailing knowledge of their properties and suitability. Villagers in the vicinity of forests utilized timbers and bamboos for cottage building and the inferior varieties of wood as fuel. Timbers of the better quali-

1 The conservation of the forest resources of Canada being rapidly depleted by the consumption of wood in the pulp mills, formed, in 1924, the subject of an inquiry at the hands of a Royal Commission.

ties were transported over long distances to towns for building purposes. Several cottage industries likewise drew their supplies of raw material from forest areas, and this privilege of using public forests, under certain limitations, is allowed to be exercised by the people living in the neighbourhood even at the present day. The grasses growing in the forests are useful not only as fodder for cattle but for making thatch roofs and manufacturing a variety of articles like baskets and mats. Barks of trees and myrabolam are recognised tanning materials and they continue to be used in large factories working on modern lines. The manufacture of sandal wood oil reminds us of another industrial use of forest produce, while the resin and lac industry has, in recent years, attained very important proportions. "India possesses in her lac, the monopoly of a raw product which may be regarded essential in the arts and manufactures of Europe and America." The occurrence of lac is known as far east as the Mekong valley and Siam, but it does not appear to occur beyond the western and the northern boundaries of India. The largest production takes place in Chota Nagpur, Central India, the Central Provinces, Sind and Burma. Lac is obtained from the exudation of a resinous substance from the body of a tiny insect which feeds on certain trees; and resin, lac wax and lac dye are the three important products obtained therefrom. These materials are largely used in trades connected with hatting and felting, gramophone records, varnishes, polishes, lacquering, toys and sealing wax, and the lac dye is supposed to be one of the fastest and brightest reds for dyeing silk and wool.

When during the last war, India was called upon to supply the needs of the British armies in the eastern theatre and was thrown entirely on her own resources for the purpose, the economic possibilities of the country's natural resources of every kind were demonstrated in a manner which would hardly have been possible under normal conditions. Burma, which is so rich in timber, supplied a large part of the requirements, and in fact that province has as many saw mills as all the other provinces put together. The reserved forests in Burma which cover 29,000 square miles,—and it is the largest area under forest in any single province in the country, —are calculated to yield an enormous quantity of raw material, and it is stated that when opened out, they will constitute an immense reservoir of timbers and grasses of great value. Attention has been

long directed to the utility of Indian grasses such as sabai or bhabar; and bamboos have recently been proved to be a suitable raw material for the manufacture of paper. The former of these have been used with success by Indian paper mills for over a generation, and the commercial possibilities of bamboos in that direction have been, during the past few years, explored and established. Bamboo pulp may well take the place of wood pulp, quantities of which have to be imported every year for separate use or for mixing with grass in paper manufacture. Thousands of tons of sabai grass are being cut from areas in Bengal, the United Provinces and Nepal for the use of paper mills in northern India. Enormous supplies of bamboo are available in Burma and in parts of Bengal, Orissa, Madras and elsewhere in the country and their commercial exploitation will mean a new industry for India and a considerable addition to the wealth of the people. [1] Forests may be made to supply raw material for a number of cottage industries and small-scale manufactures, e. g. pencils, boxes &c.[2]

35. Mineral Resources:—Of equally great or perhaps of greater importance to the progress of a nation are the supplies of minerals which are entering more and more into the modern mechanism of industry and even the domestic lives of the people. The use of iron, steel and cement has been fast expanding, and coal and petroleum have become indispensable means of national defence and economic progress. It is no exaggeration to say that coal and oil to-day occupy in national life and international competition, a place similar to what the precious metals held in Europe in the times of mercantilism; and the present is significantly characterised as the steel and the oil age. In the matter of mining, metallurgy and metal manufacture, as in other respects, India was, for centuries, self-supporting and in advance of other countries. Her comparative insignificance in this respect at the present day, is due to her failure to advance with the western world in the adoption of scientific methods, the use of improved machinery and the organization of industry on a large scale. In these times of mass production and keen international competition, an industry can seldom succeed unless it commands plentiful capital, can utilize by-products, employs highly

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1 See Evidence recorded by the Tariff Board regarding protection for the paper industry.

2 See Report of Commission on Agriculture in India.

efficient machinery, can secure raw materials cheap and has access to a sufficiently capacious market, interal or external, which can absorb its output. Indian mining and metallurgy, small-scale and crude, though famous at one time, could hardly be expected to hold their own in modern world conditions. The mineral resources of this country can not, of course, be compared with those of England and the U. S. A., for instance in industrial and commercial importance, but our knowledge in this respect is far from complete.

According to the geological information that is at present available, several countries are special favourites of nature, both absolutely and relatively to size and population, in respect of some mineral or minerals, and it was long believed that the mineral deposits of India were not worth consideration, as being too small to prove economic propositions. Little was, therefore, done by way of surveying, prospecting and experimenting until a generation ago when a new mineral era was inaugurated. The old prejudice died hard, however, and the mineral possibilities of the country took years to win appreciation. Coal, manganese, iron, petroleum, gold and limestone are among the more important minerals which are at present being extracted on a commercial scale. The economic principle that far from production determining the values of commodities, the values at which commodities can be placed on a competitive market, determine whether there will be any production, how much of it there will be, and where it will be, is well illustrated by the history of several industries in India and particularly of Indian mining, with its difficulties of transport and heavy costs connected therewith. It is also interesting to note how the occurrence of the various minerals in different localities affects the growth of the industries and the trade of the country. Distance from the ports and the principal markets is another factor in the industrial situation. Man can not choose the places where he will take delivery of nature's gifts and must make the most of her ways of their distribution, which produce far-reaching economic consequences. The concentration of coal deposits in the north-eastern and central parts of the country in the vicinity of iron, jute and certain grasses but far away from the cotton of the west and the south and from several other raw materials scattered over centres of industry, is an instance in point. "White coal", another of nature's gifts, can, however, be substituted for black coal and the hydro-electric works in the Bombay Presidency

and in Mysore, are good illustrations. We shall illustrate and discuss the latest developments in mineral production in an Appendix to this chapter and give below a table showing the quantities and values of the important minerals raised in India over a series of years :—

Production of Minerals in India.

		1895–96	1905–06	1914–15	1925 £1 = Rs.13.3
Salt	tons	11,63,381	12,91,137	13,48,225	12,95,144
	Rs.	61,58,189	66,20,879	72,49,356	£ 574,627
Coal	tons	35,40,019	84,17,739	1,64,64,263	2,09,64,372
	Rs.	1,29,33,303	2,12,91,649	5,86,10,695	£9,503,888
Gold	oz.	258,158	630,816	687,388	3,93,875
	Rs.	1,72,32,876	3,62,34,572	3,50,75,330	£ 1,673,501
Petroleum	gals	13,003,748	144,798,444	25,9342,710	28,95,00,000
	Rs.	15,39,231	90,63,051	1,43,78,470	£7,740,727
Chromite	tons	...	2,708	5,888	37,452
	Rs.	...	52,230	39,160	£40,171
Iron Ore	tons	46,653	1,02,529	4,41,674	15,44,578
	Rs.	2,77,886	207,399	6,10,001	£ 336,775
Magnesite	tons	...	2,063	1,680	29,620
	Rs.	...	(c) 8,252	3,453	£ 31,179
Manganese ore	tons	15,816	253,896	682,898	8,39,461
	Rs.	10,7,636	32,71,565	1,31,58,965	£ 2,619,220
Mica	cwts.	10,231	31,554	40556	45,990
	Rs.	10,72,213	23,94,413	13,21,351	£ 853,851
Saltpeter	cwts.	421,784	336,464	316,211	2,02,189*
	Rs.	53,59,534	38,53,340	42,01,476	33,65,363*
Tin-ore	cwts.	440	1,527	5,395	37,494*
	Rs.	23,464	1,48,570	3,29,276	23,01,041*
Silver	ounces	...	...	2,36,440	42,44,304*
	Rs.	...	...	4,03,440	1,01,28,504*

36. Coal, Iron and Petroleum:—The table which is given below, will convey a clear idea of the peculiar distribution of the coal deposits in India, both British territory and the Indian States. Out of the total raisings of the mineral, nearly 90 per cent. come from mines in the two provinces of Bihar and Orissa and Bengal, Central Provinces and Hyderabad State coming at a long distance and contributing only about 5 per cent. between them. The coal fields are classified on the geological basis as (1) the Gondwana system of strata, chiefly composed of sandstones and shales deposited in fresh water and by rivers and (2) the tertiary or cretaceous beds.

* Figures for 1922-23.

The former belong to Bengal, Bihar and Orissa, Central India, Central Provinces and the Hyderabad State and account for 80 per cent. of the coal supplies of India and the latter, contributing the remaining 20 per cent., are located in Baluchistan, Assam, the Punjab and Rajputana. The Ranigunj, Jheria and Bokaro fields, lying at a distance of 120 to 150 miles to the north-west of Calcutta, constitute to-day the largest mining centre in the country and yield some of the best coal available. The iron industry requires superior qualities of coal, called 'coaking' coal, and the total quantity of it available has been estimated at 1,000 to 2,400 million tons while the aggregate reserve of all kinds of coal has been put down at 54,000 million tons.

The distribution of coal production by British Provinces and Indian States is shown in the following table :—

Production of Coal in each Province and State in India (British India).

(In Tons).

	1901–5 average.	1906–10 average.	1911–15 average.	1916–20 average.	1925
Burma	7000	...	...	1,500	25
Assam	2,52,000	292,000	296,000	300,000	318,842
Bihar & Orissa	2,323,000	6,796,000	9,669,000	12,695,000	13,938,506
Bengal	4,149,000	3,526,000	4,463,000	4,982,000	4,913,852
Punjab	55,000	55,000	66,000	51,000	74,662
N. W. F. Province	...	...	...	...	...
Baluchistan	34,000	47,000	49,000	39,000	34,797
Central Provinces	167,000	180,000	236,000	426,000	708,554
Madras	...	...	...	...	...
Total	7,001,000	10,896,000	14,739,000	18,493,000	19,989,241

Indian States.

Hyderabad	423,000	455,000	537,000	662,000	667,877
Rajputana (Bikaner)	28,000	21,000	17,000	13,000	28,153
Central India (Rewah)	175,000	151,000	147,000	188,000	219,106
Total	6271,000	626,000	701,000	863,000	915,136
Grand Total	7,627,000	11,523,000	15,440,000	19,356,000	20,904,000

Attempts have been made from time to time for over a hundred years to establish a successful iron and steel industry in the country but all the earlier efforts proved dismal failures. The story of the discovery of huge iron ore deposits of an extraordinarily high quality and lying in a tract known as the 'Iron Belt' in Singbhum and the Keonjhar, Bonai and Mayurbhanj States of Orissa, reads like a romance. These deposits are estimated at 3,000 million tons and lie within a convenient distance of the coal required for purifying the ore. The vicinity of coal fields and the iron ore deposits, is an advantage of inestimable value to the iron and steel industries of India, which is enjoyed by very few countries in the world. Iron ore exists also in the Central Provinces and Mysore. Another mineral of considerable importance is petroleum and its production in India has shown a gratifying increase during the past few years. It is found in two distinct areas at two extreme ends of the country, viz. Assam, Burma and the islands of the Arakan coast in the east and the Punjab and Baluchistan in the west. Of the two the eastern zone is by far the most important, contributing 95 per cent. of the total oil, and the most successful oil fields are found in the Irrawaddy valley. In gold production, the Kolar field in Mysore provides almost the whole of the Indian output; the Anantapur mines in Madras make an insignificant contribution and the operations at the Nizam's mines at Hutti in Hyderabad have ceased. The increase in the output of manganese has been remarkable within recent years. The total reserves of this mineral are of immense dimensions. The industry was first started in the Vizagapatam district, but the Central Provinces were found to pos-

sess richer deposits, and the latter now occupy the dominating position in respect of manganese. Wolfram, the chief ore of tungsten, shot into prominence during the time of war on account of its special value in the manufacture of high-speed steel. It is highly useful in the manufacture of modern hard-wearing tools, and for other purposes. Salt is manufactured by the evaporation of sea and lake water and is also extracted from salt mines. About 60 per cent. of the total quantity of salt consumed in the country, is locally produced. It was long a mystery why, with such an extensive coast line, India could not be self-sufficient in the supply of a necessary of life like salt though it was, besides, largely a State monopoly. Government has, therefore, been at last induced to order an inquiry into the possibilities of the development of the salt industry. The chief raw materials of cement manufacture, viz. lime stone and clay, are found in various localities all over the country, and distance from coal fuel and from the market are the decisive factors in the state of the industry.

37. Motive Power :—Wealth production is nothing but the creation or increase of the capacity of matter to satisfy a human want. It was discovered at a very early stage of civilization that this arrangement, manipulation or adjustment of objects as they are found in nature so as to render them more suitable for consumption or enjoyment, was facilitated by the use of some instrument or mechanism which supplemented man's energy. Even in the remote Vedic times the Indian Aryans used such auxiliaries for the cultivation of land and for conveyance purposes. The physical labour of man is, however, unequal to the resistance encountered and too weak for operating the implements; and the force of cattle came to be utilized in its stead. For drawing ploughs and carts, lifting water from wells, carrying loads, crushing cane and seeds, threshing grain &c. cattle have been used from time immemorial in India as elsewhere.

Further economy of energy and therefore of cost can be brought about by the substitution of the forces of nature for human or cattle power. As the industrial machinery becomes complicated and heavy, the necessity of using some motive power obtained from nature becomes more urgent. Under the old industrial economy of India the power of air or water has been rarely used as the motive force. The era of machinery, however, has dictated the growing use of steam, electricity and gas. Wind mills and water mills will turn small wheels and run light machines; steam and electricity are need-

ed to drive big engines. The introduction of steam as power for propelling the engine revolutionized the mechanism of industry a hundred years ago, and the supply of coal necessary to generate it, became an indispensable factor in the modern industrial organization. Electricity is coming into greater use as motive power, and water stored at great heights can generate it more cheaply than coal, though the cost of the latter is lighter than that of wood fuel. Electrical power can, besides, be transmitted over long distances where it may be required for industrial purposes. The limited supplies of wood, coal and of oil fuel and the world's increasing demand for them, have driven people to discover the possibilities of water power for generating electricity as a competitive source of energy. The discovery of this 'white coal' and its utilization in Switzerland, Norway and America have signalized a great economic advance.

Certain natural advantages must be present in order to enable water power to be harnessed; and the initial cost of hydro-electric schemes is enormous. But the ultimate saving is considerable and the running cost is small. The mountains and rivers of India afford natural facilities for the inauguration of such schemes, and other things being favourable, there is a great future before them in this country.[1] The Cauvery works in Mysore and the Tata hydro-electric works at Lonavala, demonstrated how motive power, capable of working a number of factories at a distance, could be created by means of water dammed in the beds of rivers or stored in big lakes formed in suitable valleys and fed with the rainfall which may be very heavy there. The Andhra Valley and the Mulshi projects have followed in succession; and mills, factories and railway trains in Bombay can be run with power generated miles away and without the inconvenience of the dirt, the soot and the smoke associated with coal and oil. In point of fuel supply, the Bombay Presidency is most unfavourably situated, being far away from coal mines and the use of electrical energy generated by the force of water will mean a big saving in industrial cost and a considerable economy of fuel. It is not, therefore, a mere coincidence that Bombay city is the first place in India to start hydro-electric works on a gigantic scale and to sub-

1 "An approximate though incomplete, calculation of all kinds of power in use in India, shows a total of 1,248,336 horse power or 936,000 Kilowatts. The continuous water power is estimated at 813,140 Kilowatts but the potential minimum capacities at 55,382,000 Kilowatts or 7,400,000 electrical horse-power."—Quoted from the Labour Gazette, Feb. 1923.

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stitute water power for coal in its mills and factories. Difficulties in connection with coal supply have led to increased use of water power in France, Germany, Italy and Austria in recent years. The position of the coal industry in India which had to be investigated by committees, points to the same development in this country, especially owing to keen foreign competition. The question of utilizing the natural advantages the country offers in this regard, has been taken up by Government and investigation has been made of suitable sites in different provinces. The possibility of utilising water power for industrial purposes in various parts of the country, the Punjab, Madras and Bihar and Orissa, has been clearly demonstrated. As to water transport, little appears to have been done to investigate the possibilities of rivers which lend themselves to development. Many of the rivers in northern India are navigable over long distances, while those in other parts are not; but it is possible to extend this navigation for purposes of transportation by means of canals. In any case, the situation in Provinces like Bengal, calls for efforts in this direction. Several creeks on the coasts are utilized, on a small scale, in this way for the conveyance of goods. Owing to its long coast line, India might be expected to possess several harbours, and in the past brisk trade was carried on from many of these with foreign countries. But the use of huge ocean steamers led to the development of a few convenient and large ports like Bombay, Karachi, Calcutta and Rangoon and the old harbours have decayed or are used for small coastal trade only. We live in an age of large-scale economic activities in industry and trade. Some of these ports may, however, be improved with advantage and be made serviceable for trade at different points on the coast. Vizagapatam on the east coast has thus recently been developed into a Major Port. Reference has been made, in connection with irrigation, to the utilization of water by means of canals taken from rivers or storage works.

38. Land:—As the most fruitful source of livelihood for man and cattle, the soil has ever been regarded with veneration in India, and the agricultural industry occupies a high place in public estimation. In quite physiocratic fashion, the mass of Indian people attribute to the soil almost exclusive productive capacity, and other industries appear to them as more or less parasitical. This is but natural in a social economy in which agriculture predominates, and

the deep attachment of the people to the soil is thus easily accounted for. But it is an irony of fate that agriculture is tending to become a supplementary occupation owing to fragmentation of holdings and growth of population. Ownership and possession of land yield a sense of independence and a person having it, commands the means not only of producing food but of securing anything he may require in exchange, because the demand for what he has to give is universal. About 72 per cent. of the Indian population subsists upon agriculture, and with the disappearance of the indigenous industries, this percentage has been steadily growing. Barely one acre of land is available per head of the agricultural population and it would not be surprising if the soil felt increasing pressure. The following figures[1] are instructive and variations in this regard over a period of years are not important. The figures of 1921-22 may, therefore, be taken as approximately accurate :—

Classification of Area.

	Acres.
Area by professional survey	666,619,000
Area under forest	88,419,000
Area not available for cultivation	153,178,000
Cultivable waste	151,173,000
Fallow land	50,564,000
Net area cropped	223,184,000
Irrigated area	47,790,000

The proportion of cropped to total area and the number of population per 100 acres of cropped area in each province are stated below:—

	Proportion of cropped to total area.	Population per 100 acres of cropped area.
Bombay	55 per cent.	55
Delhi	60 ,, ,,	222
Bihar and Orissa	48 ,, ,,	134
United Provinces	52 ,, ,,	127
Bengal	47 ,, ,,	188
Punjab	42 ,, ,,	80
Madras	38 ,, ,,	125
C. P. and Berar	37 ,, ,,	59
North-West Frontier Province	29 ,, ,,	97
Manpur	23 ,, ,,	71
Ajmer-Merwara	17 ,, ,,	167
Assam	16 ,, ,,	131
Coorg	14 ,, ,,	125
Sind	13 ,, ,,	81
Burma	10 ,, ,,	83

1 Agricultural Statistics of India.

If areas sown more than once are taken as separate areas for each crop, the gross area cropped in 1921-22, for instance, amounted to 256,582,000 acres and was distributed among different crops as under :—

	Acres	Per cent. of total.
Food grains	204,791,000	80·00
Condiments & Spices	1,412,000	0·5
Sugar	2,522,000	1·0
Fruits & Vegetables	5,538,000	2·1
Miscellaneous food crops	1,245,000	0·5
Total food crops.	215,508,000	84·1
Oil-seeds	14,197,000	5·5
Fibres	13,854,000	5·4
Drugs	854,000	0·3
Dyes and narcotics	2,247,000	0·9
Fodder crops	8,608,000	3·4
Miscellaneous non-food crops	1,113,000	0·4
Total non-food crops.	40,731,000	15·9

In a later chapter dealing with the production and supply of food for the people of India, it will be shown how these are inadequate to meet the normal demand. To relieve the steadily increasing pressure of the population upon the soil, not much cultivable area is now available, though what is called cultivable waste may, to a certain extent, be brought under the plough. There are parts of the country, particularly in the Indian States, which are awaiting the immigration of farmers to utilize them. Here we have a problem of first rate constitutional and national importance. Redistribution of the population requires the satisfactory establishment of constitutional relations between the States and British India. But making allowance for this we must say that the supply of land in India is limited and is proving inadequate with the steady growth of population, and reliance must, therefore, be mainly placed upon intensive farming.[1] The fact of the recent increase of the population

1 "Subtracting the land thus utilised for supplying foreign markets from the total area under cultivation, we shall find that what is left over does not represent more than two-thirds of an acre per head of the total Indian population. India, therefore, feeds and to some extent clothes its population from what two-thirds of an acre per head can produce. There is probably no country in the world where the land is required to do so much."—*Peoples and Problems of India* by Sir T. W. Holderness.

dependent upon agriculture, is of great economic significance. It is an indication of the decadence of the old handicrafts and the growing dependence of the mass of the people upon agriculture. By some this development is explained as the result of the more remunerative character of farming, particularly the cultivation of the commercial crops which command high prices in the outside markets.[1] This does not appear to us a correct explanation, and it can be demonstrated that artisans and craftsmen who formerly could make a living by their traditional callings, have been driven to the soil by the decay of their ancestral industries, caused by the competition of foreign manufactures and that farming by itself is insufficient to maintain a large number of cultivators' families who have to supplement their earnings by selling their labour to others in different ways. Mr. Datta's statement quoted at the foot of this page, will be true only if we take it in the sense that half a loaf is better than none.

39. Pressure on the Land:—It can not be denied that the high prices of agricultural produce such as cotton, wheat, jute and oil-seeds mean a larger amount of income to the cultivator, and in certain parts of the country, the agricultural population has benefited by the increased foreign and local demand. Higher rents are also being paid by cultivators to their land-lords who have secured considerable unearned increments. It must be remembered, however, that higher prices of commodities in general, of which those of agricultural produce form a part, mean a proportionate restriction of the margin of this profit. Further, the rise in the prices of agricultural produce has not been so great as appreciably to compensate for the disadvantages of the cultivator. Again, Indian agriculturists are not, as a class, *entrepreneurs* like farmers in the West. Lack of knowledge, co-operation, enterprise and means, prevent the cultivators from reaping the full benefit of high prices, and mobility is conspicuous by its

1 "On the whole, though no great reliance can be placed on the classification of the population by occupation in the census returns, there is no doubt that the number of agriculturists has increased more in proportion than either the total population or the number of labourers. The increase in the number of agriculturists may be taken as indicating that the profits of agriculture were such as to attract workers from other occupations to agriculture."—K. L. Datta's Report on High Prices.

absence among them. Non-agriculturists will not take to land unless they are attracted to it by its social and economic advantages or are forced to do so by the grim prospect of starvation, though they may combine farming with their inherited occupations. They will usually stick to their precarious traditional callings rather than enter more promising fields of labour. And where are the alternative openings to which they can turn? With several rural families, agriculture has become a subsidiary occupation. Many of them, therefore, simply drift into agriculture and add to the number of those who must be supported by that industry or continue to cling to land though it may not benefit them. The suggestion, that the agricultural population has increased on account of the superior attraction of the agricultural industry and the prospect of higher profit is, therefore, unwarranted. There are indeed a few well-to-do people, professional men, pensioners and others who invest their savings in land on account of the peculiar economic security it affords. But agriculture is rarely remunerative in their hands and their numbers as well as those of artisans and others who purchase lands with the object of carrying on farming as a business, must be extremely small.

The report on the census of 1911, in the chapter on occupations, throws much useful light on this subject. We there read:—'On the one hand, the rise in the price of food grains has made agriculture more profitable, while, on the other, the profits of the various artisan classes have been diminished, owing to the growing competition of machine-made goods, both locally manufactured and imported, with the result that these classes show a growing tendency to abandon their traditional occupations." And further:—"The local cobbler on the other hand, having to pay more for his raw material and feeling the increasing competition of machine-made goods, has been tempted to abandon his hereditary craft for some other means of livelihood, such as agriculture or work in factories of various kinds." Those artisans with whom agriculture was a subsidiary calling, are being compelled to throw up their proper crafts and to take to the overcrowded occupation of farming. The Census Report observes:—"The subsidiary table shows that many village artisans are also partly dependent on agriculture. This supports the statement made elsewhere that there is at present a tendency for these persons to abandon their hereditary occupations in favour of

farming."[1] The report on the latest census, that of 1921, states that "compared with 1911 the agriculturists have increased a little faster than the total population, though fishermen and hunters are fewer." The total population connected with pasture and agriculture increased 1·8 per cent. during the intercensal period.

Though there are certain areas in the country which may be developed, the scope for extensive farming is now comparatively insignificant. The land in most parts of India has been under cultivation for centuries, and persistent and peaceful cultivation during the last few generations has indubitably been subject to the law of uneconomic or diminishing returns. The operation of this law can be arrested only by improved methods of farming and the application of more capital to the land. To-day those who should devote their labours to the manipulation of raw materials, join the army of cultivators engaged in producing those materials and food grains. Among the conclusions Mr. Wattal[2] has derived from his elaborate study of census and agricultural statistics, are the following:—That though there are sparsely populated areas they are not so because they are awaiting development but because the character of the soil is inhospitable and there is no further room for the development of cultivation; that in all the old Provinces the pressure of population on cultivation is fairly intense; that the average per unit of the agriculturist population hardly exceeds an acre and a quarter and shows a tendency to fall; that development of the country can only mean a development of irrigation, but irrigation has no very bright future before it, and that the agriculturist population is increasing at the expense of the industrial and trading populations. These views, based upon the census of 1911, may perhaps require slight correction in respect of a few parts of the country, but they will be found to represent the existing situation with sufficient accuracy.[3] There is a two-fold remedy which may be applied, within limits,

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1 See the Author's article on this subject in the *Mysore Economic Journal* for February, 1915.

2 'The Population Problem in India.'

3 The writer of the census report for Bengal remarks:—"In Bengal the holdings have been so minutely subdivided that there is not enough work for the cultivators, but on the other hand there is no other work to which they can turn their hand".—Census Report, 1921, Vol. 1

to relieve pressure of rural population, viz transplantation to sparsely populated areas in the territories of Indian States and the colonization of tracts commanded by new canals, as in the Punjab and in Sind, the Sukkur Barrage scheme affording ample scope for this purpose.

40. Fertility of the Soil:—It is a common belief among Indian cultivators that the soil is not as fertile to-day as it was in the past. This notion can not be disposed of as being a mere prejudice and be put down to ignorance and to the natural human disposition to disparage the present and exalt the irrevocable past.[1] Increasing population and unbroken peace have allowed land no rest, and the fertility exhausted by continued cultivation has not been restored to the soil by the use of rich manures. It is an admitted fact that the soil does not receive the rest it badly requires and is constantly put under crops; and that many of the materials which ought to be used as manures, are being either exported or utilized for other purposes and wasted. And this is bound to result in soil deterioration. The question of prohibiting or restricting the export of oil seeds, bones &c. out of which manures are made, has recently received much attention at the hands of agricultural experts in India, and the trend of the latter's opinion lends support to the view advanced here[2]. What has been stated in different places in this book with respect to the effects of the old economic equilibrium, holds good in this case also. The traditional methods of cultivation are being found to be inefficacious and new practices are not being substituted. The extension of railways has, in Provinces like Bengal, destroyed the natural drainage of the soil owing to embankments put up, the use of new irrigational facilities has created water logging and soil deterioration in various places and the indiscriminate production of commercial crops, stimulated by temporary money gains, has brought similar evils in its train.

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1 "With the increase in the acreage of cultivation, especially of less fertile soils, the average outturn is bound to decrease, but to establish a deterioration it must be shown that the land which was under cultivation in former times now yields less than it did before" and official reports on this point would seem to lead to the conclusion that the theory of deterioration "has been frequently exaggerated though it is not denied that in several areas the cultivation of land must have become less efficient than before."—K. L. Datta: Report on High Prices.

2 See Report of Commission on Agriculture in India.

What are called the natural and original powers of the soil vary from one part of the country to another and determine the character of the crops raised there and also the standard of living of the agricultural population. The cultivator in the Konkan, for instance , can, with difficulty, eke out a bare subsistence while his brother in Khandesh or Satara gets rich and bumper crops out of his rich soil. The Konkan rayat can obtain a certain and a bountiful rice crop with the aid of the plentiful supply of water which a generous rainfall almost invariably provides and by means of his careful labour and liberal manuring ; but such land is restricted in extent and the other available areas are extremely niggardly. The fertility of the Gangetic plains is well-known; and so is the productivity of the soil in river valleys all over the country. The farmer can not, however, depend upon the natural properties of the soil to provide a perennial and uniform source of income even where nature is bountiful as those powers must be steadily exhausted unless they are replenished from time to time. Where land is abundant, as in a newly settled colony, extensive cultivation is the rule, but in old countries, the demands of a growing population have to be met by resorting to methods of intensive cultivation. Rapid and cheap means of transport have, no doubt, brought the old world into closer touch with the new, and the food problem of the former has been, to a large extent, solved. This international phenomenon is reproduced in the interprovincial and interdistrict sphere in this country. But while India can not afford the means to buy her food from outside, the urgency of intensive cultivation is, in her case, extremely great because a better distribution of available food supplies, must be supplemented by increased production. The demand for the agritural products of this country in the world's markets, is bound to increase steadily and there will be a scramble for the possession of Indian raw materials among foreign nations. Owing to foreign demand the prices of our raw products have gone higher, and they will constitute an immensely valuable source of wealth for the country. The productive capacity of the soil must, however, be increased if any substantial benefit is to be reaped by the people in the face of increasing population and of rising prices all round. This would require more capital, better methods of farming, improved implements and the systematic organization of the agricultural industry. The recent imports of wheat into India and the

difficult competition Indian rice has to meet in foreign markets, convey a warning in this connection, which must be correctly interpreted.

41. Value of Land :—So far we have confined ourselves only to the natural properties and advantages of the soil and to the varying degrees of value they confer on land. Changes in social conditions, improvements in the means of transportation and the creation and expansion of markets also exercise a similar influence, and land which is comparatively unimportant to-day will be highly valuable tomorrow. Lands which were on the margin of production a few years ago, fetch high rents to-day on account of remunerative crops like cotton, groundnuts, tea and sugarcane, being grown in them. Lands which are brought in contact with new internal or external markets by railways, become immediately more remunerative and this phenomenon is particularly noticeable in the case of land in the vicinity of towns and railway lines. Intensive farming becomes possible in these cases and the saving made in the cost of transportation and the high prices obtained for the products of suburban farms confer higher values upon lands. Social causes do for these lands what natural gifts do for others. One striking phenomenon of the last few years, is the increase of land values which has taken place all over the country. The increase is mainly due to the high prices of agricultural produce and to growing industrial and commercial activity and is proportional to proximity to business centres, railways and other means of easy communication. When we consider the changes in the values of urban and suburban lands used and capable of being used as building sites, the phenomenon is more interesting still. Land which is an uneconomic proposition as an agricultural holding, fetches unheard of rents as a building plot. The growing population and the expanding trade and industries of towns, lead to an increasing demand for lands and their values have been steadily going up. Ground-rents are consequently rising at a rapid rate in all towns and in centres of industry and trade. The housing problem is, therefore, becoming every day more difficult and demands serious consideration at the hands of municipalities.

With every crop taken out of the soil we steadily exhaust its natural productive capacity, and it is by means of manures that the fertility is restored to it. But in the case of the extraction of

minerals, such restoratives are not available. An increased supply can be obtained only by going deeper into the mines, and though the operation of the law of diminishing returns may be temporarily checked by improvements, a time comes when the cost becomes prohibitive and the supply of minerals is exhausted. New sources are indeed opened out in the country or outside; and international exchange tends to establish an equilibrium. The law of substitution also operates in the same direction. These considerations do not, however, allay national apprehensions. For instance, the prospect of the exhaustion of the English coal fields, has led some people to advocate the adoption of measures to conserve the supply, though the comforting assurance is given by some that by the time the prophesy is fulfilled a century or two hence, a cheap substitute for coal will already have been found. That fate of the reserves of subterranean wealth causes similar anxiety in India; and the problem is further complicated here by the fact that the people of this country have yet only a small share in the wealth extracted. The minerals once taken out, can not be restored and as the mines are at present worked, in the absence of indigenous enterprise, the country does not get an adequate value, for that wealth is being exploited by foreigners. It is, therefore, not unnatural that people in India should look askance at the exploitation of the country's mineral resources by outsiders and should be anxious to retain them in their own hands and to prevent them from being handled by non-Indians for their own profit.[1] The growing quantity of the mineral wealth raised in the country is not a decisive proof of its advancing prosperity if that wealth is, for the greater part, appropriated by people who do not count India as their home. On the contrary, it is a

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1 "In view of the fact that minerals can not be replaced or replenished, a special heavy responsibility lies upon both the people and the Government. No serious harm certainly can result from postponing for even a quarter of a century the extraction of precious metals like gold and precious stones like rubies or diamonds. On the other hand, as trustees of the permanent welfare of the Indian people the Government should recognize the serious injury that would be caused to those interests from exploitation by outsiders who have no permanent stake in the country."—Presidential Address at the Madras Industrial Conference, 1908. Similar views were expressed in the presidential address at the Industrial Conference, 1906:—"In such cases, I can not but think that it would be to the permanent good of the country to allow petroleum to remain underground and gold to rest in the bowels of the earth until the gradual regeneration of the country, which must come about under British rule, enables her own industrialists to raise them and to get the profit of the industries."

distinct loss to the country because so much of its potential wealth has been removed abroad without a corresponding return[1]. It may indeed be argued here that whoever exploits natural resources, is a benefactor of mankind, that resistance offered to such exploitation means the retardation of the progress of civilization and that, in any case, the unearthing of nature's treasures must confer upon the people of the country concerned some benefit, however slight it may be. There is a certain amount of truth in the statement; but this altruism does not, even to-day, obviously appeal to the leading nations of the world who are seen to wrangle in an unedifying manner over oil concessions and monopolies in Asia, Africa and Europe. India is not, besides, a new or uncivilized country, inhabited by races who have no national consciousness and is not to be compared with the eastern colonies established by European emigrants and states for economic exploitation or permanent occupation.

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1 "From the commencement of European mining in 1882, to the end of 1921 it (the Kolar Gold field of Mysore) has yielded gold bullion of a total value of over £ 56,890,000, resulting in the payment of more than £ 20,000,000 in dividends to the shareholders of the companies concerned and some £ 3,000,000 in royalty to the government of the State."—J. C. Brown: "India's Mineral Wealth."

APPENDIX

INDIAN MINERALS

In the existing conditions of the world's economic organization, minerals possess considerable international importance. The industrial value of minerals—coal, iron, oil,—as raw materials and fuels, imparts to them special economic significance which deserves to be clearly understood. Extractive industries in countries like Great Britain and U. S. A. constitute by no means a negligible factor in winning the national income; and exports of British coal, for instance, are indispensable to Britishers to secure the exchange of necessary foreign commodities. Countries like Italy, on the other hand, have to depend for the supply of coal on foreign imports, and international exchange in this connection is extremely useful to them. Nations, therefore, frame their policies according to their peculiar circumstances and needs, and India can not be an exception to that rule. The following information regarding mineral production in India will, therefore, be found very instructive, and the remark of the Director, Geological Survey of India, whose report is given below, relating to the necessity of conserving the oil supplies of India, that 'a conservative policy rather than one of intensive development seems indicated, *especially in view of the national importance of this mineral asset*' (our italics), is very significant:—

Indian Mineral Production in 1927.[1]

The following are extracts from the Report on the Mineral Production of India during 1927, by Dr. L. L. Fermor, O.B.E., A.R.S.M., D.Sc., F.G.S., M. Inst. M.M., Officiating Director, Geological Survey of India :—

MINERAL CONCESSIONS GRANTED.

The number of mineral concessions granted during the year amounted to 714 against 758 in the preceding year; of these two were exploring licenses, 603 were prospecting licenses and 109 were mining leases.

1 A statement showing the total value of the output of minerals in India during the years 1926 and 1927 was published in the *Indian Trade Journal*, dated the 11th October, 1928, page 82, and is reprinted on a succeeding page of this Appendix.

ANTIMONY

Antimonial lead is obtained as a by-product in the lead refinery at the Namtu smelter of the Burma Corporation Limited. This product contains approximately 77 per cent of lead, 21 per cent of antimony and 6 to 8 ozs. of silver to the ton, and is exported to the United States of America for further treatment. The output of antimonial lead was 1,057 tons valued at Rs. 3,20,500 (£23,918) in 1926 and 503 tons valued at Rs. 1,33,065 (£9,930) in 1927.

There is also a small production of antimony-ore in the Amherst district, Burma, which rose from 108 tons valued at Rs. 2,688 (£201) in 1926 to 500 tons valued at Rs. 10,500 (£784) in 1927.

CHROMITE

The production of chromite in India during 1927, showed the large increase of 23,825 tons to a total of 57,207 tons. For this increase the Hussan district, Mysore, was chiefly responsible. The total exports from India during the year amounted, however, only to 42,953 tons, with resultant accumulation of stocks. Chromite exported from the ports in British India amounted to 20,996 tons against 29,614 tons in 1926. Chromite mined in British India is also exported from the port of Mormugao in Portuguese India; the quantities exported during 1926 and 1927 were 10,337 tons and 21,957 tons respectively. This increased production accompanied an increase in the value per ton of chromite produced from Rs. 12·4 in 1926 to Rs. 15·5 in 1927.

COPPER

Work at the Mosaboni Mine of the Indian Copper Corporation, Ltd., in the Sighbhum district, was practically suspended during the year 1926, pending the raising of the capital required for the erection of the necessary concentrating, smelting, refinery and power plants. Early in 1927 the Anglo-Oriental and General Investment Trust, Ltd., London, assumed control, a sum of £ 350,000 was subscribed and the erection of the new plant commenced at once at the company's new site at Moubhandar, Ghatsila, together with an assisted siding from the Bengal-Nagpur Railway main line at Ghatsila, and an aerial ropeway from the mine.

The ore reserves (surface and underground) now amount to 624,539 short tons, with an average assay value of 3·88 per cent copper representing a copper content of 24,232 tons. The quantity of ore raised in 1927 was 5,000 tons valued at Rs. 2,00,000 (£ 14,925). This is in addition to 35,823 tons previously produced during development.

In addition there is now a regular production of copper matté at the Namtu smelting plant of the Burma Corporation, Ltd., assaying on the average about 41 per cent of copper, 35 per cent of lead and 70 ounces of

silver to the ton. The production during 1926 was 11,441 tons valued at Rs. 44,78,064 (£ 334,184) and averaging 41·6 per cent of copper and during 1927, 11,872 tons valued at Rs. 44,13,205 (£ 329,344) averaging 40·3 per cent of copper. The matte is exported to Hamburg for further treatment.

A small output in 1926 of 4 tons of copper ore valued at Rs. 160, (£12) and in 1927 of 10 tons valued at Rs. 400 (£30) was reported from the Nellore district of Madras.

DIAMONDS

The production of diamonds in Central India rose from 68·60 carats valued at Rs. 28,559 (£ 2,131) in 1926 to 112·74 carats valued at Rs. 44,943 (£3,354) in the year under review.

GOLD.

In 1927 there was an arrest in the secular decline in the total Indian gold production. A small decrease of some 1,176 ounces from Mysore and the cessation of the abnormal production of gold in Singhbhum in 1927 was more than counterbalanced by an enhanced output from the new lease of the North Anantapur Gold Mines, Ltd., in the Anantapur district of Madras. Although this company ceased operation in July, 1927, yet the net result was an increase of 114 ounces in the total gold output[1] of India.

Of the five mines producing gold on the Kolar Gold Field the Champion Reef and the Ooregum mines attained vertical depths of 6,610·5 ft. and 6,483·5 ft. respectively below field datum at the close of the year 1927. There has been a slight drop in the estimated ore reserves mainly due to restricted development operations, but the deepest points so far reached indicate that further exploration will probably permit an increased estimate. Brick and concrete-lined shafts and winzes are coming more and more into prominence, as they greatly facilitate the ventilation of the deeper levels. Rockbursts still continue to give trouble, and experiments are being made to minimise their effects by substituting a more rigid form of support instead of the usual timberimg and waste rock filling of the excavations. Systematic building of granite pack-walls in slopes in the Ooregum mine and filling the bottom of level with mass concrete in the Champion Reef mine are being tried to prevent the sagging of the hanging wall, and it is hoped that the frequency of rockbursts will be reduced by this new method. The persistence of payable oreshoots in the deeper levels is a very encouraging feature of this year's development work.

Owing to the great depth of the mines and the high rock temperatures—117° F. in the bottom workings—the problem of ventilation has been an extremely difficult one. It has been solved to some extent by sinking deep

1 The total output of gold in India during 1927 was 384,272·5 ozs.

vertical shafts and by an extensive use of large electrically driven fans to help the main air currents.

The total number of persons employed in the Kolar mines is 18,918.

IRON.

The production[1] of iron-ore in India has been steadily on the increase; in 1927 there was an increase over the previous year of 11·3 per cent amounting to 187, 440 tons. The figure shown against the Mayurbhanj State (692,137 tons) represents the production by the Tata Iron and Steel Co., Ltd., whilst of that recorded against Singhbhum (1,007, 037 tons) 507,580 tons were produced by the Tata Iron and Steel Co., Ltd., from their Noamundi mine, 302,258 tons by the Bengal Iron Co., Ltd., from their Pansira, Ajita and Maclellan mines, and 191,724 tons by the Indian Iron and Steel Co., Ltd., from their mines at Gua; the remaining 5,475 tons were produced by two other firms. The output of iron-ore in Burma is by the Burma Corporation, Limited, and is used as a flux in lead smelting.

The output of iron and steel by the Tata Iron and Steel Co, Ltd., at Jamshedpur works again showed an increase; the production of pig-iron rose from 609,429 tons in 1926 to 624,028 tons in 1927 and of steel (including steel rails) from 360,980 tons in 1926 to 414,738 tons in 1927; but the production of ferro-manganese fell from 10,503 tons in 1926 to 5,092 tons in 1927. The production of pig-iron by the Bengal Iron Co., Ltd., recovered from the low figures of 52,674 tons in 1925 and 20,050 tons in 1926 to 132, 649 tons in 1927; their output of products made from this pig-iron increased, however, from 44,454 tons of sleepers and chairs and 26,364 tons of pipes and other castings in 1926 to 61,494 tons and 26,431 tons respectively in 1927. There was a large increase in the production of pig-iron by the Indian Iron and Steel Co., Ltd., from 253, 431 tons in 1926 to 363,516 tons in 1927.

The Mysore Iron Works commenced producing pig-iron in 1923, when the quantity manufactured amounted to 9,732 tons; in the year under review the output of pig-iron amounted to 19,858 tons against 19,523 tons in 1926.

The number of indigenous furnaces that were at work in the Central Provinces during the year 1927 for the purpose of smelting iron-ore was 5 less than in the previous year; 95 furnaces were operating in the Bilaspur district, 48 in Raipur, 47 in Mandla, 11 in Drug, 3 in Saugor and one in Jubbulpore, making 206 in all.

There was a further increase in the production of pig-iron in India from 902,433 tons in 1926 to 1, 140, 051 tons, whilst the quantity exported rose

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1 The production of iron-ore in India during 1927 was 1,846, 735 tons.

from 309, 505 tons in 1926-27 to 393, 249 tons in 1927-28. Japan was the principal consumer of Indian pig iron in 1927-28 nearly 89 per cent of the total exports going to that country. There was a very slight rise in the export value, which was Rs. 45·1 (£3.37) per ton in 1926-27 and Rs. 45·4 (£3·39) in the following year.

The Steel Industry (Protection) Act, 1924—Act No. XIV of 1924—authorised, to companies employing Indians, bounties, which were granted upon rails and fishplates wholly manufactured in British India from material wholly or mainly produced from Indian iron-ore and complying with specifications approved by the Railway Board, and upon iron or steel railway wagons a substantial portion of the component parts of which had been manufactured in British India. This Act was repealed by the Act No. III of 1927 and consequently the payment of bounties ceased on the 31st March, 1927, but the Industry is protected to a certain extent by varying tariffs on different classes of imported steel.

JADEITE.

The fall in the output of jadeite, which commenced after the year 1922, has now ceased, and the output, which in 1926 amounted to only 1,203·9 cwts. valued at Rs. 2,34,456 (£17,497) increased in 1927 to 2,227 cwts. valued at Rs. 2,39,064 (£17,841). The output figures are liable to be incomplete, and a more correct idea of the extent of the Burmese jadeite industry is sometimes obtainable from the export figures. Exports by sea fell slightly from 2,139 cwts. valued at Rs. 4,70,225 (£35,091) in 1926-27 to 1,961 cwts. valued at Rs. 3,02,440 (£22,570). The shipments were made entirely from Burma. These figures exclude exports by land across the frontier to foreign countries as the registration of the Land Frontier Trade of Burma has been discontinued. The average exports for the past four years have amounted to a little less than half the average figures for the previous three quinquennial periods (4,660 cwts annually).

LEAD.

Corresponding to an increase in the production of lead-ore at the Bawdwin mines of Burma, the total amount of metal extracted increased from 54,330 tons of lead including 1,057 tons of antimonial lead, valued at Rs, 2,25,94,634 (£1,686,167) in 1926, to 65,967 tons of lead including 503 tons of antimonial lead, valued at Rs. 2,20,27,742 (£1,643,861) in 1927. The quantity of silver extracted from Bawdwin ores also increased from 5,103,646 ozs. valued at Rs. 88,49.722 (£660,427) in 1926 to 6,004,437 ozs. valued at Rs. 94,67,196 (£706,507) in 1927. The value of both lead and silver fell respectively from Rs. 415·8 (£31·0) per ton and Rs. 1-11-9 (31·06*d.*) per oz. in 1926 to Rs. 333·9 (£24·9) per ton and Rs. 1-9-3 (28·24*d.*) per oz. in the year under review.

MAGNESITE.

In 1926 the total Indian magnesite production was the highest yet recorded, namely, 30,461 tons valued at Rs. 3,54,355 (£26,444). In 1927 the production fell seriously to 19,638 tons valued at Rs. 2,29,338 (£17,115). The output for 1927 is, however, about the same as the average for the three years 1921 to 1923.

MANGANESE.

A rise in the output of manganese-ore in India has again to be recorded, the total for 1926, 1,014,928 tons, valued at £2,590,357 f.o.b. Indian ports, rising to 1,129,353 tons, valued at £2,844,237 f.o.b. Indian ports during the year under consideration. The figures for output in 1926 and 1927 are the highest yet recorded and exceed that for 1907, when 902,291 tons were raised. It will be noticed that concurrently with a rise in output there was, also, in contrast to the change recorded in the previous year, a rise in value, the total value for 1927 being £253,880 greater than that for 1926. In 1924 first-grade ore c.i.f. United Kingdom ports fetched an average price of 22·9*d* per unit ; in 1925 this price fell to 21·5*d.* and in 1926 to 18*d.* During 1927 the price fell from 19·9*d.* in Janunary to 16·5*d.* in September and recovered to 17*d.* in December, the average for the year being again18*d.* Consequently the increase in total value is proportionate to the increase in total quantity. A fall in price was anticipated in view of the agreement, two or three years ago, between an American group of financiers and the Soviet Government for the development on modern lines of the manganese–ores of the Caucasus ; the extent to which meanwhile such developments have actually taken place is not known, but from 1925 onwards there has been a large increase in the total output of Russia and Georgia, but only to figures that obtained before the war. Difficulties over the carrying out of the concession appear to have been frequent, and it is now reported that the group in question have decided to abandon the concession. There appears to be no reason for supposing that this will produce any serious effect upon the market for manganese-ore.

In addition to the four chief manganese–producing areas, India, Georgia (with Russia), Brazil and the Gold Coast, a further source at Postmosburg in the northern part of the Cape Province is promising ; the grade is high and the deposits extensive, the only drawback being the presence of aluminous compounds.

The increase in the Indian output is shared by all provinces except the Central Provinces and by almost all districts, the only decreases being in Gangpur State in Bihar and Orissa and the Bhandara and Balaghat districts in the Central Provinces and the Bellary district in Madras. In the case of the output from Bihar and Orissa substantial increases occurred in Keonjhar and Singhbhum. In the Bombay Presidency the Panch Mahals showed a large increase to nearly 79,000 tons, the highest figure hitherto recorded,

Chota Udaipur and Belgaum show small increases, whilst the initial production recorded from North Kanara in 1926 was double. After a break of several years Jhabua State in Central India has resumed production in 1924; it shows a third substantial increase amounting to 2,541 tons in the year under review. The most important Indian manganese area, namely the Central Provinces, shows however, a decrease of some 17,500 tons in 1927 as contrasted with an increase of over 139,000 tons in 1926, the decreases in Balaghat and Bhandara being only partly balanced by the increase in the Nagpur district. In Madras the output of Sandur State increased by over 60,000 tons to 138,196 tons, the previous highest production being 97,091 tons in 1907. There is also a substantial increase in Vizagapatam and a small decrease in Bellary. Mysore shows a small total increase in output shared by the three producing districts.

The exports of manganese-ore, which fell in 1926 by 125,300 tons, increased in 1927 by 230,000 tons to 843,821 tons. The highest export recorded was 862,777 tons in 1922. There is a steady consumption of manganese-ore at the works of the three principal Indian iron and steel companies, not only for use in the steel furnaces of the Tata Iron and Steel Company, and the manufacture of ferromanganese, but also for addition to the blastfurnace charge in the manufacture of pig-iron. The consumption of manganese-ore by the industry in 1927 was 39,065 tons, some 2,000 tons less than in the previous year.

Of the manganese-ore exported from British Indian ports (excluding the Portuguese port of Mormugao) during 1926 and 1927, the amount absorbed by the United Kingdom[1] in 1927 was nearly three times what it was in 1926; the United Kingdom has recovered her position as the chief importer of Indian manganese-ore. The quantity exported to Belgium fell by 11,500 tons, but even so this country is not far behind Britain. France maintained her previous figure; small declines in the cases of Holland and Italy were amply balanced by a large increase on the part of the United States and smaller increases by Germany and Japan.

MICA.

There was a small increase in the declared production of mica from 41,924 cwts. valued at Rs. 22,19,367 (£165,624) in 1926 to 42,614 cwts. valued at Rs. 24,52,055 (£182,989) in 1927. As has been frequently pointed out, the output figures are incomplete, and a more accurate idea of the size of the industry is to be obtained from the export figures. In both the years 1926 and 1927 the quantity exported was roughly double the reported production. The United States of America and the United Kingdom, which are

1 Exports of manganese-ore from India to the United Kingdom in 1927 amounted to 211,401 tons.

the principal importers of Indian mica, absorbed 52 per cent and 35 per cent respectively of the total quantity exported during 1926 and 23·7 per cent and 49·4 per cent respectively during 1927. During this latter year Germany took 14·2 per cent of the quantity exported. The average value of the mica exported fell slightly from Rs. 122 (£9·1) per cwt. in 1926 to Rs. 119·5 (£8·9) per cwt. in 1927.

The difference between exports and production is generally attributed to theft from the mines and early in 1928 a bill was introduced into the Legislative Council of Bihar and Orissa, the purpose of which was to attempt to reduce the losses on this account by licensing miners and dealers. The bill was, however, rejected.

MONAZITE

The monazite industry of Travancore, which was almost dead in the year 1925, when the reported production was 1 cwt. only, showed signs of revival in 1926, the output amounting to 64·2 tons valued at £ 947. This revival continued in 1927, when the output increased to 280 tons valued at £ 3,810. The decline of the industry is of course due to the supplanting of incandescent mantles for gas lighting by electricity. It is hoped that ilmenite collected with the monazite and hitherto regarded as a by-product may be the means of reviving the whole industry. Titania forms a valuable white paint superior to white lead in being non-poisonous and in possessing twice the covering power.

NICKEL

As a by-product in the smelting operations of the Burma Corporation Limited, at Namtu, in the Northern Shan States, there is now a regular production of nickel spiess, which is exported to Hamburg for further treatment. Figures of production have not been received. The first sales, which occurred during 1927, were of 814 tons averaging 24 per cent of nickel and valued at Rs. 1,34,978 (£10,073). Such speiss contains, in addition, some 10 per cent of copper and 30 ozs. of silver to the ton.

PETROLEUM

The world's production of petroleum in 1926 amounted to a little over 151½ million tons, of which India contributed 0·79 per cent. In 1927 the world's production jumped to some 171 million tons, of which the Indian proportion on a practically stationary production fell to 0·72 per cent. India is now eleventh on the list of petroleum producing countries, having been overtaken during 1927 by Columbia and Argentina. In the previous Review attention was drawn to the effect on prices of the greatly increased production of the United States and of the expansion in the output of light petroleum distillates obtained by cracking and from casing-head sources. In 1927 prices fell still lower in India at the same time as large supplies of

kerosene from Georgia and Russia made their appearance on the Indian market.

As remarked before, petroleum statistics prove that it is becoming more and more difficult to maintain the output of India (including Burma) at the high levels it reached in 1919 and 1921, when peak productions of well over 305½ million gallons were reached. During the year under consideration, the total production amounted to a little over 281 million gallons against less than 280½ million gallons in 1926 and a little over 280½ million gallons in 1925. Although, therefore, this year there has not been an actual decrease, this can only be regarded as an arrest in the decline that has set in, and which, with possible interrnptions, is likely to continue slowly and steadily during the present generation, unless a new field of importance is discovered. The chances of the latter recede year by year as exhaustive geological research continues to prove fruitless. A conservative policy rather than one of intensive development seems indicated especially in view of the national importance of this mineral asset. In contrast with the almost stationary figure of output in 1926 and 1927, the value of the oil produced fell enormously from over 7 millions sterling in 1926 to less than 4½ millions sterling in 1927.

As before, the Yenangyaung field of Upper Burma shows a decided decrease in output. In 1924 it succeeded in showing an increase of nearly 6½ million gallons, but this temporary arrest in the decline was more than balanced by the drop in 1925 of over 21½ million gallons; in 1926 the drop amounted to 14¼ million gallons, and in 1927 to 8⅓ million gollons. It is interesting to note that the production in Yenangyaung still includes oil derived from the old Burmese hand-dug wells.

It is now seldom that a new well strikes a yield of over 100 barrels per initial 24 hours. The utilization of the shallow oil-sands of this field, which were shut off during the competitive rush for the richer deep sands, continues; many remunerative wells are now being worked from two shallow zones, one at about 350 feet and the other at about 650 feet, and the production from shallow wells during 1927 amounted, in fact, to nearly 14 per cent of the total production from the field. In spite of the fact that the fall in the yield of these wells is unexpectedly gradual, the effect in delaying the decline of the field may be looked upon as but temporary. The average daily yield of these shallow wells is about 2 barrels. The electrification of the field which reached its limit of practicability in 1924, has added and is adding an appreciable contribution to the production figure, owing to the saving of a considerable quantity of crude oil formerly used as fuel beneath rig boilers.

Of the companies operating in this small field the Burmah Oil Company produce about four-fifths of the total output. Of undrilled portions of the Yenangyaung field the northern areas are showing more promise than the southern. There is now good reason to believe that as the depth increases

the crest of the anticline recedes more and more to the east; this means that the producing limits of oil pools will be found further and further eastwards as greater depths are attained. Deep test wells are being put down to prove this.

The place of Yenangyaung is being steadily taken by the Singu field which will soon usurp the premier position so far held by the older field. Singu, the greater part of which is in the hands of the Burmah Oil Company, is used to make good the deficiencies of Yenangyaung, in order to maintain supplies to the refinery. In 1927 Singu produced nearly 3 million gallons more than it did in 1926, but this was not enough to counterbalance the decrease in the older field. Many wells are producing from the 3,000 foot sand and initial yields of 500 barrels and over are not uncommon. Progress in the electrification of the Singu field has been made by the completion of the transmission line from Yenangyaung.

Yenangyat field has now reduced itself to the status of the Upper Chindwin field and is out-classed by Minbu. Some deep tests are now being sunk in this field in the hope of reviving production. A scheme by which the sandbank stretching southwards from the wells at Lanywa into the river Irrawaddy is to be protected by a revetted embankment is being carried out and has enabled a number of wells to be drilled by the Indo-Burma Petroleum Company on the sandbank. Strictly speaking, the area belongs to the Singu dome area, but for convenience of administration it will be looked upon officially as part of the Yenangyat field.

Of the other Burma fields Thayetmyo shows a small recovery instead of a decline, as also does the Upper Chindwin. The increase in Upper Chindwin took place in spite of serious interference with operations due to phenomenal floods. The production from Minbu increased by 666,530 gallons, while the Arakan fields maintain their usual small output.

In Assam in the Surma valley the Badarpur field again showed a decrease in output by over 1 million gallons. This decrease is due to partial exhaustion of the proved sands and also to less drilling. There was a small initial production from Masimpur, also in the Surma valley. In Upper Assam, on the other hand, the Digboi field showed an increase in production, amounting to nearly $1\frac{3}{4}$ million gallons. Extensions to the refinery have been put in hand and when these are complete, a large increase in output from this field may be anticipated. The results of the prospecting operations of the Assam Oil Company at Dhekiajuli, Dilli and Burragolai have been very disappointing, and although oil was obtained in the Burragolai well, the quantity was not sufficient to be of commercial value.

In the Punjab the production was more satisfactory than for some years, for the output from the Khaur field rose by nearly $4\frac{1}{2}$ million gallons during 1927.

There was a marked rise in the imports of kerosene due to small increases in supplies from the United States, the Straits Settlements (including Labuan), and Borneo, reinforced by 12½ million gallons from Georgia and Russia, from which the imports in 1926 were *nil*.

The quantity of fuel oil imported into India during 1926 was nearly 6 million gallons more than that received during the previous year, the total imports reaching 100 million gallons. Over three-quarters of the supply was derived from Persia, and the greater part of the rest from Borneo.

The export[1] of paraffin wax increased to the extent of some 7,000 tons during 1927.

RUBY, SAPPHIRE AND SPINEL.

A severe decline in the output from the Mogok ruby mines of Upper Burma in 1924, followed in 1925 by a marked drop in value, bore witness to a serious decline in the industry. The Burma Ruby Mines, Limited, ultimately decided to go into liquidation and the mines were offered for sale in September, 1926. The skeleton organisation left in charge of the mines has, however, made good use of its opportunities, with the result that the value of the output in 1926 exceeded that of the previous year by over a lakh of rupees. This encouraging result was effected by rigorous economy and an extension of a system of co-operation with local miners, and was assisted by some good finds of sapphires in the Kyaungdwin mine (the only one still worked by European methods).

During 1927, however, production fell in value by over 1¾ lakhs of rupees, due mainly to a decrease in the value of the sapphires (and spinels) produced, there being a slight increase in the value of the rubies won.

There was a reported production in Kashmir of 1·6 cwts. in 1926 and 11 cwts. in 1927 of "corundum with sapphire patches". The value was not stated.

SALT

There was a small decrease in the total output[2] of salt amounting to 26,804 tons, all provinces and states contributing to this decrease except Madras, which showed an increase of 61,255 tons, Gwalior with a small increase, and Kashmir with a stationary output of 1 ton!

The total output of rock-salt increased by 24,077 tons.

There was a considerable increase, amounting to 121,898 tons in the imports of salt, for which the United Kingdom, Spain, Egypt and Italian

1 Exports of paraffin wax in 1927 amounted to 47,700 tons.

2 The total production of salt in India during 1927 was 1,611,945 tons.

East Africa were chiefly responsible. The receipts from Germany also increased, while imports from Aden showed a small decrease.

SALTPETRE.

Although statistics of production of saltpetre in India are no longer available, the *export figures may be accepted as a fairly reliable index* to the general state of the industry. Excepting a few hundreds of tons required for internal consumption as fertilizer, almost the whole of the output is exported to foreign countries. The quantity exported in 1927 amounted to 123,018 cwts. valued at Rs. 15,22,666 (£113,632) against 98,830 cwts. valued at Rs. 13,24,540 (£98,846) in 1926.

A certain amount of nitrate of potash is used for agricultural purposes on the tea gardens of India. During the War when it was impossible to obtain supplies of imported potash the amount of locally produced nitrate utilized in this way reached an appreciable figure. The practice continued and the *quantities estimated to have been absorbed for fertilising purposes on* tea gardens in 1923, 1924, 1925 and 1926 were 1,000, 1,100, 800 and 700 tons respectively. In 1927 this figure is estimated to have been 500 tons. The decrease during the last three years is due to the fact that it is found cheaper to employ a mixture of imported sulphate of ammonia and muriate of potash.

SILVER.

The production of silver from the Bawdwin mines of Upper Burma, increased from 5,103,646 ozs. valued at Rs. 88, 49,722 (£660, 427) in 1926 to 6,004,437 ozs. valued at Rs. 94,67,196 (£706,507) in 1927. The output of silver obtained as a bye-product from the Kolar gold mines of Mysore decreased to the extent of 2,163 ozs.

TIN.

In contrast to the considerable increase recorded in the previous Review there was a small decrease in the production of tin-ore in Burma from 3,548 tons valued at Rs. 61,01,858 (£455,362) in 1926 to 3,495 tons valued at Rs. 66,17,773 (£493,864) in 1927. This decrease was due to decreases in the output of Tavoy and the Southern Shan States partly balanced by a further considerable increase in the output of Mergui. Dredging and hydraulicking for tin-ore are on the increase in both Tavoy and Mergui districts and resultant increases in the output of both districts may be anticipated. The output of mixed cassiterite-wolfram concentrates from the Mawchi mines in the Southern Shan States was 1,466 tons. The composition of these concentrates is usually 43 per cent wolfram to 57 per cent cassiterite, so that for the purpose of this review 836 tons have been assumed to be cassiterite and the remainder wolfram. There is no recorded output of block tin.

Imports of unwrought tin increased from 51,103 cwts. valued at Rs. 94,72,957 (£706,937) in 1926 to 60,589 cwts. valued at Rs. 1,16,72,352 (£871,071) in 1927; 98 per cent of these imports came from the Straits Settlements. Worught tin to the extent of 441 cwts. valued at Rs. 57,759 (£4,310) was also imported into India during the year under review.

TUNGSTEN.

During 1927 the output of wolfram decreased by some 324 tons to 1,160 tons, the decrease being shared by the three producing areas. Figures of export of wolfram from Burma are published annually, but from internal evidence it seems likely that they include the mixed tin-tungsten concentrates of the Southern Shan States; they are, therefore, not repeated here.

ZINC.

The production of zinc concentrates by the Burma Corporation, Ltd., in the Northern Shan States amounted to 58,286 tons valued at Rs. 73,19,468 (£546,229) in 1927 against 48,834 tons valued at Rs.63,24,491 (£471,977) in 1926. The export during the year under review amounted to 67,135 tons valued at Rs. 70,06,018 (£522,737) against 43,056 tons valued at Rs. 43,03,-775 (£321,177) in the preceding year.

ALUM

The output during the year under review, of alum in the Mianwali district, Punjab amounted to 1,419 cwts. valued at Rs.23,160 (£1,728) against 2,647 cwts. valued at Rs. 50,400 (£3,761) in 1926.

AMBER.

The production of amber in the Myitkyina district, Burma, rose from 39·5 cwts. valued at Rs. 21,420 (£1,599) in 1926 to 70·6 cwts. valued at Rs. 27,180 (£2,082) in 1927.

APATITE.

There was a further decrease in the production of apatite in the Singhbhum district, Bihar and Orissa, which amounted to 603 tons valued at Rs. 10,045 (£750) against 718 tons valued at Rs. 10,770 (£804) in 1926.

ASBESTOS.

Of the total production of 67·7 tons of asbestos, valued at Rs.13,554 (£1,011), 40 tons were produced in the Seraikela State of Bihar and Orissa, 22 tons in the Cuddapah district, Madras, and 5·7 tons in Ajmer-Merwara, Rajputana.

BARYTES.

The output of barytes fell from 2,311 tons valued at Rs.9,244 (£690) in 1926 to 1,719 tons valued at Rs.9,890 (£738) in 1927. Of this 851 tons were produced from the Kurnool district of Madras and 868 tons from the Alwar State of Rajputana.

BAUXITE.

There was again a small decrease in the total production of bauxite, which fell from 4,956 tons valued at Rs. 36,768 (£2,744) in 1926 to 4,310 tons valued at Rs. 28,240 (£2,107) in 1927. Of this 3,345 tons were produced in the Kaira district of Bombay and 965 tons in Jubbulpore district of the Central Provinces.

BERYL.

No output of beryl was reported during the year under review.

BISMUTH.

During 1927, 48 lbs. of native bismuth valued at Rs. 128 (£10) were produced in the Tavoy district. The only previous recorded production of this metal was of 0·71 cwt. valued at Rs. 240 (£17) from the same district in 1924.

BORAX.

Borax is produced from the Puga valley in the Ladakh tahsil of Kashmir State. The production in 1927 was 3·6 cwts. valued at Rs. 20 (£1·5).

BUILDING MATERIALS AND ROAD-METAL.

The total estimated value of building materials and road-metal produced in the year under consideration was Rs. 1,22,50,103 (£914,187). Certain returns supplied in cubic feet have been converted into tons on the basis of certain assumed relations between volume and weight. The total production of 3,249,378 tons of limestone and kankar includes the production of 59,679 tons of dolomite produced in the Gangpur State, Bihar and Orissa, mainly for use as flux in the iron and steel industry. This decreased production of dolomite in Gangpur compared with 1926 (135,424 tons) is due to the progressive replacement by limestone as a flux in the iron and steel industry.

CLAYS.

There was a decrease in the recorded production of clay, which fell from 192,838 tons valued at Rs. 4,39,620 (£32,807) in 1926 to 129,177 tons valued at Rs. 2,65,572 (£19,819) in 1927.

COPPERAS.

The production of sulphate of iron in Ladakh, Kashmir State, fell from 14·6 cwts. valued at Rs. 27 (£2) in 1926 to 8 cwts. valued at Rs. 15 (£1) in 1927.

CORUNDUM.

The total production of corundum amounted to 65 tons valued at Rs. 8,023 (£598). Of this 13 tons were produced from the Bhandara district in the Central Provinces and 52 tons from the Salem district in Madras.

FULLER'S EARTH.

The reported production of fuller's earth fell from 3,456 tons in 1926 to 2,718 tons in 1927. Mysore is chiefly responsible for the decreased figure, but its returns are not always trustworthy owing to the illiteracy of the workers. Bikanir showed a considerable increase and Jodhpur a small decrease.

GYPSUM.

There was a slight increase in the output of gypsum from 34,473 tons valued at Rs. 79,447 (£5,929) in 1926 to 38,105 tons valued at Rs. 89,809 (£6,702) in 1927. The effect of gypsum in small quantities upon crops—a common application is 2 maunds to the acre—is said to be remarkable, and its usefulness to the monsoon crops of South Bihar has been experimentally demonstrated. The Department of Agriculture, Bihar and Orissa, is importing annually for this purpose gypsum from Jamsar in Bikanir. This experimental work may, therefore, ultimately result in a demand from agricultural districts for gypsum.

ILMENITE.

There was a very large increase in the production of ilmenite in the Travancore State, which amounted to 17,809 tons valued at £33,443 in 1927 against 4,236·3 tons valued at £7,587 in 1926. This mineral is collected with the monazite sands and, up to a few years ago, was looked upon as a bye-product of the monazite industry. The increasing demand for the titania in the ilmenite is causing a resuscitation of the monazite industry, which had been adversely affected by the increased use of electricity for lighting purposes.

OCHRE.

There was a large increase in the production of ochre, which amounted to 3,472 tons valued at Rs. 27,477 (£2,051) against 1,872 tons valued at Rs. 30,177 (£2,252) in 1926. This increase is chiefly due to an output of 704 tons from the Jubbulpore district, Central Provinces, and of 697 tons from the Banda district, United Provinces, from both of which there was no production in the previous year.

REFRACTORY MATERIALS.

Besides the production of 65 tons of corundum there was an output entirely from Singhbhum of 425 tons of quartzite valued at Rs. 2,125 (£159) and of 4,425 tons of kyanite valued at Rs. 25,009 (£1,866), of which 3,665 tons were produced from the Lapso Hill mines in Kharsawan State. The total production of quartzite and kyanite amounted to 4,850 tons valued at Rs. 27,134 (£2,025) against 1,976 tons in 1926 valued at Rs. 21,755 (£1,624).

SERPENTINE.

No production of serpentine in the Skardu tahsil, Kashmir State, was recorded during the year.

SODA.

The production of soda in the Ladakh tahsil, Kashmir, fell from 20 tons valued at Rs. 733 (£55) in 1926 to 11 tons valued at Rs. 400 (£30) in 1927. Salt, consisting for the greater part of sodium carbonate, sodium bicarbonate and sodium chloride, is obtained by evaporation from the waters of the Lonar lake in the Buldana district of the Central Provinces. It is known under the general name of *trona* or *urao*, for which there is no suitable equivalent in English. The total amount of *trona* extracted in 1926 was 100 tons, the value of which was estimated at Rs. 3,000 (£224), but in 1927 there was no production, as the company working the concession has gone into liquidation. There was also a production of 1·8 tons of crude soda (*rasi*) valued at Rs. 49 (£3) in Datia State, Central India.

STEATITE.

During 1927 there was a great fall in the total Indian output of steatite due mainly to large decreases in the reported production of Singhbhum in Bihar and Orissa and Jaipur State in Rajputana.

ZIRCON.

Concurrently with large increases in the output of monazite and ilmenite in Travancore State in 1927, there was a large increase in the production of zircon in the same State, from 532 tons valued at £2,987 in 1926 to 1,465 tons valued at £8,129 in 1927.

II

Indian Mineral Production in 1927.

The following statement showing the total value of minerals for which returns of production are available for the year 1926 and 1927 is published in the Report on the Mineral Production of India during 1927, by Mr. L. L. Fermor, Officiating Director, Geological Survey of India. It will be seen that there has been a decrease of over £2,899,000 or about 11·2 per cent in the value of the total production as compared with that of 1926. An increase or decrease in value does not always correspond to a similar variation in output, and cannot, therefore, be regarded as an infallible indication of the state of an industry, states the Director. It must be understood that the figures are value figures and that a decrease does not necessarily mean a reduced output or a decline in the industry. For instance, in the cases of coal, lead, and silver, production increased substantially and the reduced value figures are due to a drop in the market price. Practically the whole of the decrease is, however, due to an enormous fall in the value of the petroleum output, the quantity of which increased slightly.

Mineral.	1926. (£1 = Rs. 13·4) £	1927. (£1 = Rs. 13·4) £
Coal	7,574,599	7,070,852
Petroleum	7,335,509	4,421,468
Manganese-ore (a)	2,590,357	2,844,237
Lead and lead ore	1,666,567	1,641,095
Gold	(c) 1,624,258	1,626,913
Building materials	860,558	914,187
Salt	836,830	849,265
Silver	663,063	708,846
Mica (b)	820,901	691,341
Zinc-ore (b)	321,177	522,787
Tin and tin-ore	455,362	493,864
Iron-ore	349,676	380,735
Copper-ore and matte	362,566	344,299
Saltpetre (b)	98,486	113,632
Chromite	30,810	65,743
Tungsten-ore	57,535	42,537
Ilmenite	7,587	33,443
Jadeite (b)	35,091	22,570
Ruby, sapphire and spinel	34,834	20,883
Clays	32,807	19,819
Magnesite	26,444	17,115
Nickel speiss	...	10,073
Antimonial lead	23,918	9,930
Zircon	2,987	8,129
Steatite	11,213	7,816
Gypsum	(c) 5,929	6,702
Monazite	947	3,810
Diamonds	2,131	3,354
Bauxite	2,744	2,107
Ochre	(c) 2,252	2,051
Amber	1,599	2,028
Refractory materials	1,624	2,025
Alum	3,761	1,728
Fuller's earth	1,761	1,687
Asbestos	786	1,011
Antimony-ore	201	784
Apatite	804	750
Barytes	690	738
Corundum	342	598
Soda	225	33
Bismuth	...	10
Borax	2	1
Copperas	2	1
Beryl	7	...
Serpentine	3	...
TOTAL...	25,819,365	22,919,947

(a) Value f. o. b. (b) Export values. (c) Revised.

III

Coal Production.

The total production in 1927 amounted to 22,082,000 tons, which is 1,083,000 tons or 5·2 per cent more than that in 1926 but still half a million tons less than the record output of 1919. To this may be added about 442,000 tons estimated to have been taken out from the mines by miners for their own use. The total production in 1927 would thus come to about 22,524,000 tons, but for purposes of comparison the figure 22, 082,000 tons should be adopted. There was an increase in the output of coal in 1927, in all the provinces except the Punjab, Baluchistan and Rajputana (Bikaner State). In Bengal and Bihar and Orissa the increases were mainly in the Raniganj, Jherria, Karanpura, Bokaro and Giridih fields. The Talcher Coal-field in Bihar and Orissa during the year under review turned out 23,300 tons of coal. The Karanpura coal-field in Bihar and Orissa produced 262,000 tons of coal in 1927 against 123,900 tons in 1926.

COAL-FIELDS.

The coal-fields which have been worked in recent years are classified below, with the quantity produced in 1927, according as they belong geologically to the Gondwana system of strata, chiefly composed of sandstones and shales deposited in fresh water and by rivers, or to Tertiary (or Cretaceous) beds :—

GONDWANA COAL-FIELDS—

	1927 tons	Per cent of total
Bengal and Bihar and Orissa—		
Daltonganj	..	..
Giridhih	855,253	3·87
Hutar	709	..
Jherria	10,583,487	47·93
Jainty	56,724	0·26
Bokaro	1,790,594	8·11
Karanpura	262,014	1·19
Rajmahal Hills	1,488	0·01
Ramgarh	340	..
Raniganj	6,472,036	29·31
Sambalpur (Rampur)	26,895	0·12
Talcher	23,316	0·10
Central India—		
Umaria (Rewah)	135,120	0·61
Sohagpur (Rewah)	82,541	0·37

	1927 tons	Per cent of total
Central Provinces—		
Mohpani	..	..
Pench Valley	505,913	2·29
Ballarpur (Chanda)	158,617	0·72
Yeotmal	2,222	0·01
Shapur (Betul)	6	..
Hyderabad State—		
Singareni	681,736	3·09
Sasti	25,477	0·12
TOTAL	21,664,488	98·11

	1927 tons	Per cent of total
TERTIARY COAL-FIELDS—		
Baluchistan—		
Khost (Sibi District)	1,734	0.07
Quetta-Pishin District	7,211	
Kalat State	5,499	
Assam—		
Makum, etc.	323,342	1.46
Punjab (Salt Range)—		
Jhelum District	39,545	0.28
Mianwali District	15,488	
Shahpur District	7,671	
Burma—		
Southern Shan States	..	..
Rajputana—		
Bikaner	17,358	0.08
TOTAL	417,848	1·89
GRAND TOTAL	22,082,336	100

It will be seen that 98 per cent of the coal supplies of India is obtained from the Gondwan coal-fields and 2 per cent from Tertiary beds.

Coal Prices.

The value of the coal produced in India is reported annually by mine-owners. It represents the actual or estimated wholesale price of coal at the pit's mouth. There was a still further decline in prices in the year

under review, the value per ton at pit's mouth for India as a whole falling from Rs. 4–13 to Rs. 4–5. The poorer grades became almost unsaleable except in the form of soft coke, and many more mines were compelled to cease production.[1] The table below compares the average value at pit's mouth of Indian coal with the declared export value per ton in each of the last five years. The declared export value is now nearly three times the value at the pit's mouth. The total estimated value at pit's mouth of the output in 1927 was Rs. 9,49 lakhs, as compared with Rs. 10,15 lakhs, the estimate for 1926.

AVERAGE VALUE OF COAL

	Declared export value per ton	Value at the pit's mouth per ton
	Rs. A.	Rs. A.
1923 . .	17 2	7 7
1924 . .	16 9	7 1
1925 . .	15 0	6 1
1926 . .	12 14	4 13
1927 . .	12 2	4 5
1923–27 (average) . .	14 12	5 15

With the above average value may be compared the values at the pit's mouth of coal in foreign countries, as shown below (the figures represent the average of the latest five years for which quotations are available.)

	Rs. A.
Great Britain . . .	12 3 (a)
Australia	11 15 (b)
Japan	9 10 (a)
United States of America . .	9 9 (b)
India	5 15 (a)
South Africa . . .	4 9 (b)

It must be borne in mind that this value is affected by many factors, such as the quality of the coal raised, its accessibility, the machinery in use, nearness to the surface, etc., besides the differences in the cost of labour and transport. In India a large percentage of the coal which is now being worked is comparatively near the surface and labour comparatively cheap. Indian coal, therefore, has a lower value at the pit's mouth than the coal of any other country except South Africa.

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1 Annual Report of the Chief Inspector of Mines in India, 1927.

(a) Average of the five years ending 1927.

(b) Average of five years ending 1926, later quotations not being available.

Freights.

In order to arrive at comparative prices of Bengal coal in the principal centres of industry in India, the freight has to be added to the f.o.r. prices. The table below shows the rates of freight (including terminal charges) per ton of coal by rail for full wagon loads at owners' risk (owners to load and unload) from the Raniganj and Jherria fields in 1927 :—

	From Raniganj		From Jherria	
	Rs.	A.	Rs.	A.
To Calcutta . .	3	6	4	9
,, Cawnpore . .	7	10	7	3
,, Jubbalpore . .	8	2	8	8
,, Delhi . . .	9	14	9	7
,, Lahore Cantonment .	12	7	12	0
,, Bombay . . .	13	12	13	12
,, Karachi . . .	16	4	15	13

The average monthly rates of freight per ton of coal by sea from Calcutta during 1927 were as stated below :—

1927	To Bombay		To Madras		To Rangoon		To Karachi		To Colombo		To Singapore	
	Rs.	A.	Rs.	A.	Rs.	A.	Rs.	A.	Rs.	A.	Rs.	A.
January .	8	8	6	0	5	0	8	4	7	0	7	0
February .	10	8	6	4	6	0	10	0	7	0	7	8
March .	10	8	7	0	6	12	10	0	8	0	8	0
April .	9	0	6	4	5	12	8	8	7	0	7	8
May. .	8	8	5	8	5	4	8	0	6	8	6	8
June. .	8	8	5	8	5	0	8	0	6	8	6	8
July. .	8	0	5	0	4	12	7	12	6	8	6	4
August .	8	0	5	0	4	8	7	12	6	4	6	4
September .	8	0	4	12	4	12	7	12	6	0	6	8
October .	7	12	4	4	4	0	7	8	6	0	6	4
November .	6	8	4	0	3	12	6	8	5	4	5	8
December .	6	0	3	8	3	4	6	0	5	0	5	0

Persons employed in the Coal-mining Industry.

Table below shows the total average number of men, women, and children employed daily in the coal mines in India. This number represents the "average daily attendance" throughout the year, and is obtained by dividing the total number of individual attendance by the number of working days in each year. Coal-mining employs more labour than any other *mining* industry in India. In 1927, 180,532 persons were employed daily as against 185,749 in 1926, a decrease of 5,217 persons or 2·8 per cent. Details for the provinces for 1927 are given below :—

Province	Men	Women	Children	Total	Per cent of total	Output per head employed
						Tons
Bihar and Orissa	76,652	32,541	3	109,196	60·5	133·0
Bengal . .	31,478	12,796	..	44,274	24·5	125·5
Hyderabad .	(a)	(a)	(a)	11,464	6·4	61·7
Central Provinces	4,880	1,673	..	6,553	3·6	101·8
Assam . .	3,613	416	5	4,034	2·2	80·2
Central India .	2,171	882	206	3,259	1·8	66·8
Punjab . .	1,221	39	..	1,260	0·7	49·8
Baluchistan (including Kalat State).	323	..	..	323	0·2	44·7
Rajputana (Bikaner).	136	11	22	169	0·1	102·7
TOTAL	(b) 120,474	(b) 48,358	(b) 236	180,532	100	122·3

The labour employed showed an increase of 776 persons in the Bengal coal-fields and a decrease of 3,749 persons in the coal-fields of Bihar and Orissa.

Output per head employed.

The table below gives the output per head employed (1) above and below ground and (2) below ground in certian specified countries. The comparison is somewhat vitiated as the figures are for different years, but nevertheless they are not without some significance. They cannot, however, be taken to give a strictly accurate idea of the relative efficiency of the labour in the countries named. Not only do the conditions of the work below ground vary greatly, but the proportion of persons employed above and below

(a) Not available.

(b) Defective, figures for Hyderabad not being available.

ground varies in different countries. In Great Britain, in 1927, for example, the workers below ground were 79 per cent of the total number employed, while in the same year in India, where mining operations are still nearer the surface, they were 69 per cent. Again, in India, labour-saving appliances are not used as largely as in other countries, though their use is increasing. These factors, however, only partially explain the relative inefficiency of Indian labour.

	Above and below ground Per head Tons	Below ground only Per head Tons
United States . .	780	930 in 1926
Great Britain . .	(c) 252	(c) 316 " 1927
Germany . . .	278	(a) " 1926
France . . .	160	225 " 1927
Belgium . . .	154	219 " 1927
Japan . . .	132	(a) " 1926
India . . .	113	166 " 1926
	122	176 " 1927

The *per capita* output of coal in India in 1927 is compared below with the results of the preceding five years :—

	Above and below ground Tons	Below ground only Tons
1923 . . .	97·8	163·7
1924 . . .	103 6	166·8
1925 . . .	110·5	173·1
1926 . . .	113·1	165·9
1927 . . .	122·3	176·4

There has been a steady increase in *per capita* output. The number of coal-cutting machines in use are increasing, 141 having been in use in 1927 as compared with 126 in the previous year, most of them being driven by electricity. These machines were in use in 55 mines. The total area undercut by the machines in 1927 was 7,555,748 sq. ft. as compared with 6,076,352 sq. ft. in the previous year. The use of machines for winning coal in the Raniganj Coal-field is rapidly extending.[1]

The total number of fatal accidents in 1927 was 196, giving a death rate of 1·1 per 1,000 persons employed as against ·99 in 1926. Most of the large collieries are now equipped with electric power.

(c) Provisional.

1 *Vide* Report of the Chief Inspector of Mines in India for 1927.

Imports and Exports of Coal.

IMPORTS

The figures represent only private merchandise. In 1927 the Imports of coal rose from 194,000 tons, valued at Rs. 45 lakhs, in the preceding year to 244,000 tons, valued at Rs. 58 lakhs. Bombay was naturally the largest importer. The contraction in imports in 1926 was mainly due to the disturbance in the world market caused by the coal strike in the United Kingdom. The provincial shares in imports were: Bombay 78 per cent, Sind 10 per cent, Burma 5 per cent, Madras 4 per cent, and Bengal 3 per cent. The Union of South Africa was the largest supplier, followed by the United Kingdom and Portuguese East Africa. The imports of coal on Government account fell from 99 tons in 1926 to 50 tons only in 1927.

EXPORTS.

The total quantity of Indian coal exported from India and the share of each of the principal importing countries during the past thirty-seven years are shown in table 8 (page 28). As in the case of import statistics, quinquennial averages only are given for the first twenty years. Bunker coal and Government stores are not included in this statement which relates only to coal shipped as private merchandise to foreign ports. On the average of the seven years, 1900 to 1906, the exports were 8 per cent of the total production of Indian coal, as against 6 per cent on the average of the succeeding seven years, 1907 to 1913. and 3 per cent on the average of the next seven years, 1914 to 1920; in the seven years 1921—1927 the ratio was 1·5 per cent, the ratio in 1927 being 2·6 per cent. That is to say, exports in 1927 were in the proportion of one ton to 38 tons produced. The bulk of the production is thus consumed in the country.

Almost all the coal shipped from India as private merchandise is sent from Calcutta. Exports of coal in 1927 were fairly satisfactory though the amount exported was less than in 1926 in which year owing to the unusual situation created by the British coal strike there was a large overseas demand for Indian coal. The total shipments in 1927 amounted to 576,200 tons as compared with 617,600 tons in 1926 and 216,100 tons in 1923. The position gained in Ceylon and the Far Eastern markets in the preceding year was generally improved on, but the special demand created during the British coal strike, in Egypt, Aden and the United Kingdom naturally passed away when normal conditions were established. Exports to Ceylon during the year improved by 40 per cent and to the Straits Settlements by 25 per cent, the share of these countries in total exports being 59 per cent and 26 per cent respectively. There was also an increase in the demand from Sumatra which took 15,600 tons as against 4,000 tons in the preceding year. Hongkong also took larger supplies.

The quantities of coal imported from the principal supplying countries and entered for home consumption in Ceylon and the Straits in each of the last ten years are stated in table 15 (pages 37–38). This table, therefore, illustrates the position which Indian coal holds in its two principal foreign markets as compared with rival supplies. The percentage shares of the principal countries in the total imports into these markets is given in the following table :—

	Into Ceylon.		Into the Straits.	
	1926	1927	1926	1927
British South Africa	50·0	45·3	20·4	20·8
United Kingdom	15·4	19·7	1·5	6·8
British India ...	26·1	29·7	14·0	15·6
Australia ...	...	...	1·8	3·2
Japan ...	...	1·0	29·6	22·9
Dutch Borneo ...	...	...	15·5	19·9
Sumatra ...	...	...	7·6	5·5

It will be noticed that in 1927, there was an advance in the proportionate share of British India in the imports into both countries. South Africa maintained the first place in the Ceylon market though there was a decline in her share; in the Straits she yielded place as in the preceding year to Japan. In 1927, 166,186 tons of Indian coal were imported into Ceylon as Government stores. The quotations given below represent the average of the prices (per ton) quoted at Colombo and Singapore during the year 1927 :—

	Colombo		Singapore	
	Rs.	A.	Rs.	A.
Indian Coal	24	2	22	10
South African Coal	26	13	23 to 24	5 to 12
Welsh Coal	30	13	31	4
Japanese Coal	*(a)*		22 to 23	11 to 8
Australian Coal	*(a)*		32	11

Coal Consumption.

In table 11 (page 29) is shown the total available supply of coal (Indian and foreign) in India, which is arrived at by adding imports (*minus* re-exports) to the total production and subtracting exports therefrom. In 1927 the figure stood at 21,706,000 tons, as compared with 20,531,000 tons in 1926 and 20,099,000 tons five years ago. Thus the estimated consumption of coal per head of population comes to ·07 ton or $1\frac{3}{8}$ cwt. a year.

(a) Figures not available.

Appended is a statement showing the estimated consumption of coal (Indian and foreign) during 1927, in each of the different classes of industries but these figures should be regarded as only approximate, and but a very rough estimate under some of the heads:—

		Estimated consumption. Tons.	Per cent of Total.
Railways	...	(a)7,259,000	33·5
Admiralty and Royal Indian Marine Shipping accounts	...	27,000	0.1
Bunker coal	...	1,317,000	6·1
Cotton mills	...	830,000	3·8
Jute mills	...	935,000	4·3
Iron, steel and brass foundries (including engineering work shops)	...	5,260,000	24·2
Port Trusts	...	205,000	·9
Inland steamers	...	636,000	2·9
Brick and tile factories (including potteries and cement works)	...	565,000	2·6
Tea gardens	...	223,000	1·6
Paper mills	...	156,000	0·7
Consumption at collieries and wastage	...	2,208,000	10·2
Other forms of industrial and domestic consumption *	...	2,085,000	9·7
	TOTAL	21,706,000	100

Consumption on railways.—Table 13 (page 30) shows the total quantity of Indian and foreign coal and of wood and oil fuel consumed on all the railways in India during the last thirty-eight years, as reported by the Railway Board. In 1927-28 the total consumption of coal amounted to 7¼ million tons or 33 per cent of the total production as compared with 5 million tons in the pre-war year 1913-14 and of this 99·9 per cent was Indian coal. The consumption of wood as fuel on railways decreased almost steadily from 1904 to 1914-15; thereafter there was an increase up to 1919-20, owing to high prices of and the difficulty in obtaining coal during the great European war. In 1927-28 the quantity of wood consumed was 109,000 tons, as compared with 108,000 tons in 1926-27. This amount may be taken as equivalent to 44,000 tons of coal, taking 2½ tons of wood as equivalent to one ton of coal. Wood is used largely on the Burma, and the Bombay,

* Domestic consumption in Calcutta and its neighbourhood was estimated by the Coal Controller in 1917 at 200,000 tons per year.

(a) For the official year 1927-28.

Baroda and Central India Railways. Besides coal and wood 131,000 tons of oil fuel were used on Indian Railways in 1927-28; this is equivalent to 23,000 tons of coal, taking 0·55 ton of oil fuel as equal to 1 ton of coal. Oil fuel is used largely in certain sections of the Great Indian Peninsula and the North Western Railways.

Consumption on Admiralty and Royal Indian Marine Shipping accounts.—The consumption in 1927 was reported to be 27,000 tons, by the Chief Mining Engineer, Railway Board and the Principal Naval Transport Officer East Indies.

Bunker coal.[1]—Statistics relating to the shipment of bunker coal have been obtained from the different Custom Houses and are shown in table No. 10, page 29. The total shipment in 1927 amounted to 1,317,000 tons. The details are:—Calcutta 873,000 tons, Karachi 132,000 tons, Bombay 143,000 tons, Rangoon 140,000 tons, and Madras 29,000 tons.

Cotton and jute mills.—Only 99 out of 306 cotton mills sent in returns. In the case of mills which furnished no returns, estimates have been made on the basis of the number of looms and spindles at work. For jute mills, data were furnished by the Indian Jute Mill Association.

Iron, steel and brass foundries (including engineering workshops).—The total reported figure comes to 2,461,000 tons. In the case of foundries which did not furnish returns, estimates have been made on the basis of the number of persons employed.

Port Trusts.—Statistics of consumption in the workshops, ferry steamers, etc., at the principal ports have been obtained from the different Port authorities.

Inland steamers.—The total reported figure comes to 632,000 tons. There are some smaller companies from which no returns were received and whose consumption has been estimated on the basis of the coal census figures for 1917.

Brick and tile manufacture.—On the basis of the census figures for 1916 and 1917, it has been estimated that 565,000 tons of coal were used in the brick and tile industry.

Tea gardens.—Estimates have been framed on the basis of data furnished by most of the important tea companies. On many tea estates wood is the only or chief fuel used.

Paper mills.—The consumption in 1927 was estimated at 156,000 tons on the basis of the reports furnished by millowners.

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1 Bunker coal is not included in the figures of export.

Consumption at collieries and wastage.—Ten per cent of the total production has been taken for consumption at collieres and wastage. With the introduction of more electrical apparatus taking current from the power stations, in place of steam plants, there will, it is anticipated, be a further decrease in colliery consumption of coal.

Other forms of industrial and domestic consumption.—A large part of the balance of 2·1 million tons must also be debited to industrial consumption, for besides the important classes of industries stated above, there are numerous other classes of establishments and factories which are worked by steam, the principal amongst which are cotton gins and presses, jute presses, flour and rice mills, dockyards, oil mills, water works, electric supply works, tramway works, gold mines, sugar factories, gas works, lime works, breweries and distilleries, petroleum refineries, ice, mineral and aerated water factories, mints, municipal workshops, stone works, woollen mills, mining works (other than coal), chemical works, dye works, indigo and lac factories, glass works, and rope works. A certain amount of soft coke is used for domestic consumption, and its use is now extending owing to the growing scarcity of wood fuel, the price of which has considerably risen.

Growth of Coal-mining Industry.

The progress of the coal-mining industry may be roughly gauged from the table below, showing the number of Joint-Stock Coal Companies and their total paid-up capital :—

	No.	Paid-up capital Rs. (lakhs)
1918-19	192	844
1919-20	236	868
1920-21	256	937
1921-22	276	10,13
*1922-23	272	10,98
*1923-24	259	11,94
*1924-25	253	12,53
*1925-26	243	12,61
*1926-27	234	12,24
*1927-28	221	11,58

The total amount of capital employed in the coal-mining industry cannot be correctly stated as reports relating to the capital employed by private individuals and syndicates are not available. There were 210 Joint-Stock Coal Companies at work in Bengal and Bihar and Orissa on the 31st March,

* Excludes figures for companies in Bengal that went into liquidation but were not finally dissolved ; these were formerly included.

1928. A list of these, together with the amount of their authorised and paid-up capital and the debentures issued, is given in table 14 (pages 31-36). The collieries worked by Joint-Stock Companies accounted for 73·7 per cent of the total output of the Bengal and Bihar and Orissa coal-fields in 1927. *Outside Bengal and Bihar and Orissa, there were only 11 Joint-Stock* Companies at work during the year. Eighteen of the Coal Companies at work on the 31st March, 1928, had a paid-up capital (exculsive of debentures) of Rs. 15,00,000 or more, as shown below.

		Paid-up capital Rs.
Burrakur Coal Company	...	68,45,940
Singareni Collieries Company	...	63,15,950
Coalfields of Burma	...	62,32,430
Bengal Coal Company	...	40,00,000
Talcher Coalfields	...	40,00,000
Villiers	...	35,00,000
Lodna Colliery Company (1920)	...	29,00,000
M. K. Khanna & Company	...	25,00,000
Tori	...	25,00,000
Equitable Coal Company	...	24,00,000
Karanpura Development Company	...	20,00,000
Villiers Colliery Company	...	20,00,000
Baraboni Coal Concern	...	19,92,520
New Beerbhoom Coal Company *	...	17,80,000
South Karanpura Coal Company	...	17,50,000
Dhemo Main Collieries	...	16,00,000
East Indian Coal Company	...	16,05,575
Bhalgora Coal Company	...	15,97,000

There were eighteen others, each of which had a paid-up capital of Rs. 7,50,000 or above but less than Rs. 15,00,000.

CHAPTR V

HUMAN EFFORT

42 Nature and Labour:—Economic walfare, that is man's well-being, so far as it depends on the satisfaction of material wants, is indispensably conditioned by the peculiarities of external nature. How India stands in this connection, has been already shown, and we have now further to ascertain how the people of this country secure their living from nature and how the efficiency of their efforts to satisfy wants may be improved. Rivers, lakes, rainfall, heat, moisture, wind, seas, harbours, mineral deposits, forests and fertile soil are the spontaneous gifts Nature offers to man, but that kind mother yields her blessings only at labour's earnest call. Not only are Nature's 'free' gifts truly invaluable in the sense that they have no 'value in exchange' though their 'value in use' is incomparably great but they are indispensable. But she has her moods and freaks, smiles and scowls, and must be coaxed and forced into granting her gifts. The water of lakes and rivers must be conveyed to fields thirsting for moisture and it has often to be sought in subterranean depths and collected in wells before it can be lifted for use ; the minerals must be extracted from the earth; trees in the forests must be felled and removed; and the soil must be ploughed and cultivated. Man's physical and mental powers have been constantly exercised in devising means of conquering natural difficulties and of extracting the utmost benefit from his environments. In his migrations man has tried to occupy the fairest parts of the earth and to satisfy his elementary wants, but has not always succeeded in doing this with ease ; and he has had to struggle with the obstacles placed in his path by Nature. Many economic stages had, therefore, to intervene before he rose to the present state of industrial organization in civilized countries. If we leave aside the wild tribes of the Mundas, Gonds, Bhills and the like that are still found in the jungles and hills of the country, not far removed from the primitive condition in which man subsists in the savage state by hunting and pasture, we find

that the bulk of the Indian population has, for centuries, been prosecuting agricultural and other industries with skill, patience and perseverance. The story of the immigration of the Aryans into India and their penetration into the east and the south, recorded in ancient, indigenous literature, is suggestive of the stages through which the people passed and of the economic evolution which took place among them. The clearing of jungles, the settlement of village communities and construction of towns represented the early struggle with nature and the development of civilization, characterised by the growth of agricultural and manufacturing industries.

Nature does not smile on all parts of the country alike. She frowns upon man in several places and is niggardly in dispensing her gifts. In many tracts of the country, the people have had to struggle very hard to eke out a living and with great difficulty has the land been made capable of supporting human life. The intensity of this struggle with nature has moulded the character of the people in different parts of the country in different ways. While, therefore, some have become most hardy, courageous, and enterprising or have learnt, like lotus-eaters, to take life easily and to scorn manual labour, others have become poor, patient and docile workers. On the whole, however, the value of labour in the production of the necessaries of life, as also of comforts and luxuries, has been universally appreciated, and the old arts and industries of India testify to this fact. The importance of physical and intellectual labour in the acquisition of wealth and in the attainment of progress, has been always duly recognized and insisted upon. The Indian farmers, craftsmen and traders are well-known for their intelligence, patience and skill and though labour in this country came to be confined to distinctive grooves and to be specialized in certain castes, the essential conditions of productivity have been indisputably present in it. Slavery in ancient and serfdom in later times were recognized institutions in the west; in Hindu India the Brahmins and the Kshatriyas were placed above economically productive labour and the Vaishyas and the Shudras were expected to undertake the organization of production and exchange and the rendering of manual service respectively. It became the dharma or duty of each class and caste to perform its hereditary functions honestly and efficiently.

43 The Labour Factor :—The requisite of production represented by land and the forces of nature is essentially passive. The active agent of wealth-creation is human labour which is defined, as it is usually understood, as muscular energy directed by intelligence. *In Economics the word is applied to every effort* made by man in contributing directly or indirectly to production and refers alike to the human energy spent by a common workman in the field or the factory and to that of the Viceroy and the Commander-in-Chief of India. Ordinarily, however, labour means the manual and intellectual energy brought to bear upon the work of material production by all those who directly participate in wealth-creation. It should be borne in mind that in Economics, correctly understood, it is not labour in general, in its technical natural sense, that is of significance. The economist is interested in labour in its social sense, that is labour put forth and utilized in definite social conditions. Labour has an economic and social as well as a natural and technical aspect. We have to do mainly with the former.[1] The value of land itself as a factor of production, may be partly the result of the labour bestowed upon it ; and implements and machinery required for wealth-production are also the product of human labour. Yet the natural powers of the earth and the atmosphere and the pre-existing wealth which is used by the producer in the act of wealth-creation, are both essentials of production which can be distinguished, with sufficient clearness, from labour. To satisfy his wants man has always used his physical and intellectual energies, in varying degrees, and as in the case of land, so in that of labour, the quantity of wealth produced will be conditioned by the efficiency of the factor of production concerned. If more utilities are created in the same amount of time and with the same amount of energy or the same utility is produced in a less amount of time and with a smaller expenditure of energy, other things remaining the same, that is a distinct economic gain, attributable to better utilization of labour power, and appropriated by the individual and probably also shared by the community and represents a recognized step in material progress. The efficiency of workers and their condition, therefore, play an important part in determining individual income, the national dividend and the welfare of society. As the essence of wealth-creation lies in the

1 **Karl Diehl**: *Theoretische Nationalokonomie.*

surplus of pleasure over the pain of labour or sacrifice, the smaller the amount of the cost, the higher will be the gain. But smallness of the remuneration paid to labour either in money or goods, does not often denote a larger surplus because the contribution of that labour to production may not be sufficiently high; and the gain of individual employers may be likewise secured at the cost of poor workmen. Low wages may sometimes prove more costly than high wages. An important aspect of this question falls within the limits of distribution and will be considered in a later chapter.

In Vedic times all labour appears to have been regarded in India as honourable because it contributed to the production of wealth which was so necessary. In the course of evolution, however, definite functions came to be indentified with certain classes which ultimately developed into numerous castes with superiority and inferiority of social status attached to them. The white-skinned Aryan conquerors reduced the native races of the country to a state of serfdom, and an economic organization was set up not unlike what prevailed in Europe in feudal times. The black people were condemned to do toilsome and dirty work and were practically excluded from the pale of society. These Shudras, however, steadily won a growing measure of freedom, and the Aryans themselves took to trades and occupations, prohibited to them, as the simplicity of economic life was gradually lost. The stigma of the Shudra still clung to him and his disabilities became hereditary, though he could occasionally rise to higher social positions. Brahmins,Kshatriyas, Vaishyas and Shudras formed the fourfold social and economic division of the Hindu community and this was the Chaturvarnya of the Bagavadgita, the Smritis and other works, based in theory upon the qualities and acts of individuals but in practice upon birth. The caste system, thus solidified, has been described by Cossa as 'division of labour gone to seed.' It made for specialization in production and for a degree of efficiency promoted by the worker being born to specific work and learning his trade under the paternal roof in a favourable atmosphere. Under that system, hereditary trades were divided and subdivided, each being assigned to an independent social section. But these water-tight compartments killed individuality, originality and freedom of action and led to rigidity and stagnation. Dignity of labour became compromised as servants, craftsmen and artisans were sharply distinguished from the 'twice-

born,' the higher social orders. The evil was aggravated by the multiplicity of castes into which the four-fold division degenerated and which rendered economic freedom impossible. Birth, rather than fitness and inclination, became the basis of the division ; and the stability and the very existence of society came to be bound up with the maintenance of the inelastic system.

Originally, the Brahmin was the guardian of learning and culture, the educationist and the priest, the Kshatriya was the ruler and the soldier, the Vaishya was the husbandman, trader and money-lender and the Shudra was the artisan and dependant, whose duty it was to serve the three higher castes. Law-givers like Manu and statesmen like Chanakya have emphasised the imperative duty of the ruler strictly to up-hold this organization. Why there was such a dread of a mixture of varnas and castes, can be easily imagined if the position of the Aryan inhabitants of India among other people with whom they had to live, is carefully considered and realized. But the ideal division of social functions and occupations among the jatis and varnas which it was sought to maintain intact, could not be perpetuated in practice. Birth has indeed remained the supreme test of the social division, but the occupational distinction and the division of labour have broken down under the pressure of political and economic necessity, even among the higher classes of the twice-born.[1] Thus the taking of interest or usury is absolutely prohibited to the Brahmin, but the rule has been rarely observed in practice. Vertical and horizontal movements among the classes, from the point of view of their economic functions, which were common in early times,[2] but were weakened in the middle ages of India, gradually gained in strength owing to social and economic pressure and their force to-day appears to be simply irresistible. The hereditary caste is indeed still impregnable, but the occupational barriers no longer stand as rigidly as they did before. A caste is not now an exclusive economic class except in certain occupations with which a lower social

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1 The authors of the Dharma Shastras have graded the means of earning a livelihood, and therefore, labour as inferior and superior and have assigned them, as appropriate, to the different social classes. See Narada Smriti, 1. 43-55.

2 For an interesting discussion of this economic mobility in olden times, read Prof. A. N Banerji's article on "Studies in Economics of Ancient India" in Vol. X of the Annals of the Bhandarkar O. R. Institute.

status is associated, and does not necessarily connote a specific, preordained economic function. The various ways of earning wealth are, more and more, being promiscuously followed by members of different castes, and there is no doubt that, so far as favourable opportunities have offered themselves, this freedom to take up the most suitable job, has resulted in increased individual efficiency and in greater social benefit. The purely social status and the purely economic function have no longer an identical significance.

44. Labour Efficiency:—Indian labour is said to be cheap but at the same time comparatively very inefficient and, therefore, really dear. The cheapness appears to be both the cause and the effect of India's poverty; and even if the Indian labourer is not receiving his due share of the national dividend, his remuneration can not be sufficiently large so long as the total product and his contribution to it are small. In point of efficiency, the Indian workman is compared with his western brother to his great disadvantage, and it is stated that the British or the American labourer is three to six times as efficient as the Indian workman. Now, efficiency is the relative capacity or power to contribute to the creation of wealth and is possessed by individuals in varying degrees. It is common experience that of two workmen, one will do more and better work than the other in the same amount of time and it may pay to employ six men of the first type at a higher rate of wages than ten of the other at a lower rate. This efficiency consists of various elements such as manual skill, intelligence, steadiness, honesty, reliability and physical strength; and while some of the qualities enumerated are essential in all kinds of industrial work, others are specially needed in particular jobs. Labour is, again, distinguished as skilled and unskilled according as it is or is not trained to execute with efficiency the manipulation of matter with the assistance of tools and machines. In judging the efficiency of Indian labour, different classes of work and of operatives must be clearly kept in view as conditions in this respect vary from industry to industry and work to work. The factors which peculiarly militate against efficiency in this country are the hot climate, the unsuitability of work the labourer is called upon to do and a lack of sufficient nourishing food, education, training and ambition. The Indian labourer is now expected to work in the midst of surroundings which

are unsuitable, unfamiliar and unattractive to him, and his efficiency will not be found to be lower than that of workers in other countries in cases where he is not placed in an unfavourable position. Comparisons such as the one stated above, will not be fair to the Indian labourer, who is the victim of the conditions that surround him and is not inherently incapable, if they are not made with due caution.

It must be borne in mind here that if the foreign workman is three or four times as efficient as the Indian worker, his wages are higher in proportion, and the latter may not, after all, be comparatively inefficient if the total labour cost to the employer is taken into consideration.[1] This question arises prominently in connection with large-scale industries where the Indian workman suffers from the handicap of inexperience, want of training and unsuitability of employment, but it has been proved that he does not take long to be able to tackle new and difficult industrial operations with success. This fact is demonstrated by the rapid expansion of organized industries in the course of the last generation in connection with cotton, jute, coal, iron, steel, paper, cement, matches and glass. Labour possessing the requisite aptitude is not found in sufficient quantities in industrial areas which are determined by the location of raw materials and markets and has to be imported from outside. But locally available labour, such as it is, soon picks up the work it is called upon to handle, and even people living in jungles like the Santhals have now proved their adaptability to modern industrial requirements. The productive capacity of labour is, to a certain extent, determined by the materials and the tools it has to use; and in order that it may do its best, the best western types of factory buildings, machinery and organization have to be installed and, where necessary, they must be modified to suit Indian conditions. Today, Indian labour is specialized under the old indigenous

1 Take coal mining as an illustration. The output per head of miners working below ground was 164 tons in India in 1923 as compared with 203 in France and 268 in the United Kingdom in the years 1919 and 1922 respectively. But the average value of coal at the pit's mouth was only Rs. 6¼ in India as against Rs. 9½ in France and Rs. 16¼ in the United Kingdom. As the Report on the Production and Consumption of Coal in India for 1924 points out, "this value is affected by many factors, such as the quality of the coal raised, its accessibility, the machinery in use &c besides the cost of labour and transport." Reports for later years bear out the truth of the above comparison as may be seen from a reference to the Appendix to the last chapter.

organization of industries; and the craftsman or the artisan who does not sell his labour to another, plays an important role which must be studied along with that of the hired operative. The labour of the autonomous worker is regular, systematic and efficient. The peasant tilling his own land, the weaver working at his own loom, the blacksmith and the potter plying their trades on their own premises, the carpenter making things to order or for sale on his own account, will not require supervision as will the hired labourer in the field or the factory. The efficiency of the wage-earner is thus determined by conditions different from those of the autonomous producer.

45. Occupations of People:—Before the advent of machinery and steam-power in this country, the quality of Indian labour was reported to be of a high order. The artistic work of India was famous throughout the world, and the intelligence, skill and thoroughness of Indian farmers, spinners, weavers, builders, metal workers, carpenters, leather workers, potters, carpet-makers and carvers was undoubted. Though the fine products of Indian labour are being fast displaced by machine-made goods imported from abroad, we still obtain them in sufficient quantity and variety to testify to the high level of efficiency reached in India. It is a well-known fact that in the first quarter of the last century, the products of Indian looms competed successfully, both in quality and price, with the piece goods turned out in English factories, till at last they were driven out of the field by machine-made goods and by the selfish and short-sighted policy of the East India Company. Owing to the decadence of the old indigenous industries, the inability of the people to start new ones to take their place and the difficulty of immediate adjustment to changing conditions, the variety of skilled labour referred to above, is coming more and more to be restricted to rural areas and the small towns, the demand of the urban population being met, on an increasing scale, by machine-made goods, foreign and Indian. So far as artistic skill is concerned, the worker can still hold his own in competition with his western brother. And Indian cotton and silk cloth, carpets, pottery, silver ware, carving, metal work, toys and other products of skilled manual labour still excite the admiration of the foreigner who generally buys them as curios. The edge of the inventive faculty of the Indian worker has, of course, steadily worn off and he sticks to old designs or copies

models more often than he strikes into new patterns. Unskilled labour has been plentiful and the supply of physical strength is sufficient to meet the demand for heavy and strenuous work. Much of the monotonous and rough work which is performed by machinery in the west, is still done by manual labour in this country and the scope for unskilled workers is, therefore, ample.

We give below two tables, taken from the report on the latest census, which show the numbers of persons, men and women, engaged in different occupations, classified under various heads, according to the nature of their means of earning a livelihood:—

1 :—*Occupations of the Indian Population.*

Occupation	Total supported (In Lakhs)	Actual Workers (In Lakhs)		
		Male	Female	Total
A—Production of raw materials ...	23,11·9	7,23·3	3,37·0	10,60·3
I—Exploitation of animals and vegetation. ...	23,06·5	7,20·9	3,35·8	10,56·8
1 Pasture and Agriculture ...	22,90·4	7,15·2	3,34·1	10,49·4
(a) Ordinary Cultivation ...	22,16·4	6,81·4	3,21·6	10,03·3
(i) Income from rent of agricultural land ...	99 8	26·9	10·3	37·2
(ii) Ordinary Cultivation ...	17,31·2	5,34·7	2,11·9	7,46·6
(iii) Agents, managers of landed estates (not planters) &c. ...	6·1	2·3	·2	2·6
(iv) Farm servants and field labourers ...	3,79·2	1,17·4	99·3	2,16·7
(b) Growers of special products and market gardening ...	24·6	8·4	6·0	14·4
(c) Forestry ...	4·8	1·7	·7	2·4
(d) Raising of farm stock ...	44·2	23·5	5·4	28·9
(e) Raising of small animals ...	·2	0·7	·04	·1
2 Fishing and hunting ...	16·0	5·7	1·7	7·4
II—Exploitation of minerals ...	5·4	2·3	1·1	3·4
3 Mines ..	3·9	1·7	·8	2·6
4 Quarries of hard rocks ...	·7	·3	·1	·4
5 Salt &c. ...	·6	·2	·1	·3
B—Preparation and supply of Material substances ...	5,56·1	1,80·2	77·1	2,57·4
III—Industry ...	3,31·8	1,06·3	50·4	1,57·2
6 Textiles ...	78·4	24·5	15·7	40·3
7 Hides, skins and hard materials from the animal kingdom ...	7·3	2·5	·5	3·1

Occupations of the Indian Population.

Occupation	Total supported (In Lakhs)	Actual Workers (In Lakhs)		
		Male	Female	Total
8 Wood ...	36·1	12·3	3·4	15·8
9 Metals ...	18·0	6·3	·8	7·2
10 Ceramics ...	22·1	7·4	3·4	10·8
11 Chemical products properly so-called and analogous ...	11·1	3·7	2·0	5·7
12 *Food industries* ...	*31·0*	7·3	9·2	16·5
13 Industries of dress and the toilet ...	74.2	24·9	9·0	34·0
14 Furniture industries ...	·2	·1	0·1	·1
15 Building industries ...	17·5	6·0	2·0	8·1
16 Construction of means of transport ...	·5	·2	·08	·2
17 Production and transmission of physical force (heat, light &c.) ...	·2	0·9	·01	·1
18 Other Miscellaneous and undefined industries ...	33·7	11·0	3·9	15·0
IV—Transport. ...	43·3	17·6	2·0	19·7
19 Transport by air ...	·0006	·0006	...	·0003
20 " " Water ...	7·4	3·3	.1	3·4
21 " " Road ...	•21·4	8·5	1·5	10·1
22 " " Rail ...	12·5	4·9	·3	5·3
23 Post office, telegraph and telephone ...	2·0	·7	·02	·7
V—Trade ...	181·1	55·7	24·7	80·4
24 Banks, establishments of credit, exchange, & insurance ...	9·9	2·8	·3	3·4
25 Brokerage, commission and export ...	2·4	·8	·04	·9
26 Trade in textiles ...	12·8	4·1	0·8	4.9
27 " " skins, leather and furs ...	2·3	·7	·1	·8
28 " " wood ...	2·2	·7	·3	1·0
29 " " metals ...	·6	·7	·4	·2
30 " " pottery, bricks &c. ...	·6	·1	·1	·3
31 " " chemical products ...	1·2	·4	·09	·5
32 Hotels, cafes, &c. ...	7·6	2·2	1·2	3·4
33 Other trade in food stuffs ...	92·8	27·8	14·6	42·5
34 Trade in clothing and toilet articles ..	2·8	1·0	·1	1·1
35 " " furniture ...	1·7	·5	·1	·7
36 " " building materials ...	·7	·2	·1	·3
37 " " means of transport ...	3·3	1·2	·1	1·3
38 " " fuel ...	5·1	1·3	1·7	3·0
39 " " articles of luxury and pertaining to letters, arts &c. ...	4·5	1·4	·5	1·9
40 Trade of other sorts ...	30·4	9·6	3·7	13·4
C—Public Administration and Liberal Arts ...	98·46	36·6	4·5	41·1

Occupations of the Indian Population.

Occupation	Total supported (In Lakhs)	Actual Workes (In Lakhs)		
		Male	Female	Total
VI—Public force ...	21·8	9·9	·4	10·3
41 Army ...	7·5	4·3	·03	4·4
42 Navy ...	·005	·002	·0003	·002
43 Air force ...	·01	·008	...	·08
44 Police ...	14·2	5·5	·4	5·9
45 VII—Public administration ...	26·4	9·3	·7	10·0
VIII—Professions and Liberal arts ...	50·2	17·3	3·3	20·7
46 Religion ...	21·5	8·9	1·4	10·4
47 Law ...	3·3	·9	·01	·9
48 Medicine ...	6·5	1·7	·7	2·5
49 Instruction ...	8·0	3·0	·3	3·3
50 Letters & Arts & Sciences ...	7·6	2·7	·6	3·3
D—Miscellaneons ...	194·0	65·8	39·3	105·1
51 IX Persons living principally on their incomes ...	4·7	1·3	·5	1·8
52 X Domestic service ...	45·7	17·1	8·2	25·3
53 XI Insufficiently described occupations ...	110·9	35·7	23·7	59·4
XII—Unproductive ...	32·5	11·6	6·8	18·5
54 Inmates of jails, asylums and alms houses ...	1·4	1·2	·06	1·2
55 Beggars, vagrants and prostitutes ...	30·2	10·1	6·6	16·8
56 Other unclassified non-productive industries. ...	·8	·2	·1	·3

11 :—Comparative Proportion of Women in Important Industries.

Occupation.	Number of Women workers per 1,000 men.	
	1921	1911
Ordinary Cultivators ...	326	368
Field Labourers &c. ...	846	967
Plantations ...	898	894
Coal Mines ...	525	542
Textiles ...	642	657
Food Industries ...	1259	1647
Trade in food stuffs ...	627	594
Dealers in grass &c. ...	1268	1264
" fuel " ...	1327	1806
Midwives ...	2141	2798
Labourers unspecified ...	769	740

46 Different Classes of Labour :—A general idea of the nature of Indian labour having been given, a few perliminary observations are necessary before we proceed to a more detailed treatment of the subject. Census statistics of occupations of the people are not calculated to do more than convey a rough impression of the means adopted by various classes of the population for earning a livelihood. But it should be noted that in India division of labour is far from complete, that industrial specialization is most imperfect and that millions of persons follow more than one occupation. Thus agriculture is a subsidiary industry with many and some combine with it trade, trnsport and money-lending. The Burman is stated to be proverbially versatile in this respect, and it appears that the less advanced a community is, the less specialized are its economic activities. The census report speaks of dual occupations whose intimate association by nature or custom is a feature of Indian rural life, 'such as money lending, shop keeping and grain dealing; fishing, and boat keeping; sheep breeding and blanket weaving; cattle breeding and dairy farming; field labour and mill labour.' The three essentials of production viz. land, labour and capital may be supplied by the same individual or they may be contributed separately by different persons. There are numerous people who have nothing but their labour to offer in order to obtain a living and they constitute a distinct class of 'labour.' Farm servants and field labourers avowedly belong to this category, and such workers have to be employed in all industries, even those carried on on a small scale. There is a floating nondescript population in almost all parts of the country which supplies the hired labour required on the plantations, in the mines and in the large-scale industries. The economic value of the work done by women is not ordinarily recognized, but apart from domestic functions, they usefully co-operate in agriculture and cottage industries and likewise earn a living as independent labourers employed in factories, large and small.

Wage-earning labour in its simplest form can be easily distinguished in 'organized' industries in which the workman plays his characteristic role as contributing one of the three factors of production and receiving a contractual remuneration for the work done. This wage system is the outstanding feature of the modern organization of industry, and it is gradually spreading in India. An effort

has, therefore, been made as part of the general census, to obtain detailed information relating to organized industrial establishments, and useful results have been obtained. For the purpose of this enquiry, an 'industrial establishment' has been taken in the latest census to mean "any premises wherein, or within the precincts of which ten or more persons are employed on separate remuneration in any process for making, repairing, ornamenting, finishing or otherwise adapting for use, for transport or for sale any article or part of an article". The following are interesting details regarding labour employed in organized industries:—

Industrial Census.

Industrial Class.	Numbers in 000's	Percentage
ALL INDUSTRIES ...	26,81	100
I—Growing of Special Products ...	8,21	30·6
II—Mines ...	2,67	10·0
III—Quarries of hard rocks ...	27	1·0
IV—Textiles and connected Industries ...	7,73	28·8
V—Leather &c. Industries ...	14	·5
VI—Wood &c. " ...	33	1·2
VII—Metal " ...	1,70	6·3
VIII—Glass and Earthenware ...	82	3·1
IX—Chemical Products ...	1,09	4·1
X—Food Industries ...	1.10	4·1
XI—Industries of Dress ...	12	·4
XII—Furniture Industries ...	7	·3
XIII—Building ...	30	1·1
XIV—Construction of Means of Transport and Communication ...	1,55	5·8
XV—Production, application and transmission of Physical Forces ...	15	·6
XVI—Industries of Luxury ...	56	2·1

47 Agricultural Labour:—India is a land of villages which number about seven lakhs and are scattered all over the country. To be exact, out of a total population of 31,60,17,751 souls, as many as 28,35,98,975 (nearly 90 per cent.) live in 6,85,622 units of rural territory as compared with 3,24,18,776 residing in 2,313 units of urban territory; more than 22 crores of persons derive their living from the cultivation of land; 10 crores are directly associated with agriculture and as many as $3\frac{1}{4}$ crores out of the latter are women. Of the 10 crores, actual workers number $7\frac{1}{2}$ crores, less than $2\frac{1}{4}$ crores out of this number being women. A little less than $2\frac{1}{4}$ crores are farm servants and field labourers inclusive of about one crore of females. In spite of its supreme importance in the life of the

people, the agricultural industry appears to be in a deplorable state of disorganization and fluidity, and it is not easy to ascertain the exact position of labour engaged in it. The information supplied in the census reports, though collected and compiled with great care, does not help us much on account of the complexity of the legal status and the economic relations of persons connected with and working on land. As regards the agricultural labour represented by the peasant proprietor and the steady farm worker, there is no question about its being most patient, assiduous and skilful. The labour of such a land-owning farmer as also of the permanent or semi-permanent tenant of a zamindar, must be distinguished from that of a landless worker who hires himself out to another and is a seasonal and casual labourer or is an annual tenant. The latter often owns a piece of land himself and works both on it and on the farm of a local landowner. This landlord-cum-labourer does, besides, other kinds of work; plies his cart for hire and markets field produce. The women of the house also work in the fields in a similar manner. Women labourers are employed for weeding, harvesting and other simple operations. They look after and milk cows and buffaloes, and make cow-dung cakes which are sold in the neighbouring town; and milk, grass and firewood are also similarly taken for sale every day. Agricultural labour is thus mostly seasonal and not specialised as in western countries, unless it is continuously employed on a farm in one capacity or another; and spinning, weaving and other simple trades are also carried on under the roof of the cottage with the help of paid labour. Complaints have recently been loudly made by landlords that farm-labourers have grown more lazy and indifferent and that while there is an increase in the rates of wages, efficiency is deteriorating. Increased demand for all kinds of labour outside the village, migration and urban influences are largely responsible for this tendency.

The impression has long prevailed that the Indian cultivator is a very indifferent worker, dull-headed, unenterprising and inefficient; but it seems to be derived from the fact that his holding is often too small to be economic, that he is nearly always without capital, without good implements and manures and without those other characteristics which give a farmer the appearance of a progressive and capable worker. Latterly, however, the Indian culti-

vator has come to be better appreciated[1] and it is stated that in the art of agriculture he has little to learn, except, of course, the new methods which scientific progress has taught. Dr. Voelcker, consulting Chemist to the Royal Agricultural Society of England, who was deputed to make inquiries and suggest improvements in respect of Indian agriculture more than a generation ago, stated it as his deliberate opinion that 'the ideas generally entertained in England and often given expression to even in India, that Indian agriculture is, as a whole, primitive and backward, and that little has been done to try and remedy it are altogether erroneous.' The earlier attempts to foist on the cultivator crops and implements of western origin without regard to the conditions in which he had to work, proved a failure and the discredit fell to the share of the poor Indian agriculturist. It took the experts several years to realize that improvements in the methods of the Indian cultivator were possible only if they were introduced in a practical, cautious and sympathetic spirit. The 'perfect picture of careful cultivation, combined with hard labour, perseverance and fertility of resource,' to which Dr. Voelcker testified from personal observation, is to be seen even to-day all over the country ; and what the industry badly needs is better organization, adjustment to changing economic and social conditions and the suitable application of scientific and technical methods calculated to improve the productivity of land and efficiency of the labour working on it.

48 Handicrafts:—The Indian village is generally self-contained except where it has been brought into close contact with the outside world by the railway. The improvement of the means of communication, the importation of machine-made goods and their diffusion throughout the country have, however, disorganised the self-sufficing organization of villages. The hereditary occupations of the inhabitants of villages are calculated to supply almost all the necessaries of life, and the labour involved in them is specialized,

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1 "It was long before the stage was passed of considering that the West must teach the East, that the East had nothing to teach the West. Real progress came only when it was realised that in India we have to deal with an agricultural practice which has been built up on the traditional custom of years and in which reside, though unexpressed and unexplained, deep scientific principles the reasons for which can only gradually be elucidated."—"Agriculture in India" by James Mackenna.

being, in most cases, a caste or communal function. But the village organization is fast undergoing a change. The hereditary skill of several classes of artisans finds a steadily diminishing demand owing to the introduction into villages of machine-made articles, Indian and foreign. They are thrown back upon the land which some of them own and thus press upon the soil except when new tastes and wants provide them employment in their old industry adjusted to changing circumstances or they find employment outside the village in new industries and trades. The caste of each worker determines for him the occupation he will follow. Though some people will disdain to touch the plough, 'it may be noted that agriculture, including field labour, is the occupation which has drawn away most of those who have deserted their traditional calling'. There are again, various occupations, which are not specially earmarked, such as service under Government or private employers, house building, transport, the learned professions, trade &c. which persons of all castes seek to follow; and with the spread of education, the competition for employment in these directions will become increasingly severe. Struggle for existence, contact with western civilization and spread of education are great solvents; and they are loosening the rigidity of caste organziation. Thus the higher classes among the Hindus, e.g. the Brahmins have taken to trade, and such occupations as tailoring, watch-repairing, metal work, type-setting and printing, weaving, engine-driving, carpentry, shopkeeping, &c., are no longer, barred to them. Owing to a lack of demand for their goods, the hereditary skill of several artisans has deteriorated and it is only to satisfy the simple wants of village people or the artistic tastes of the wealthy few that rural and urban craftsmen ply their industries.

The artistic and elaborate industries are naturally more common in urban than in rural areas as a greater variety of commodities and articles of luxury have a special demand there. Labour connected with the making of gold thread and rich cotton and silk dhoties and saries, of brass and silver vessels, of jewellery, of toys, of bangles, of carpets and such other goods, is found in towns, large and small, while in villages artisans, craftsmen and labourers are engaged in turning out rough articles of every day use. The weaver plies his handloom under trees in front of his hut and the potter turns his wheel in the open space before his hovel. The

blacksmith works at his anvil and forge to make and repair the carts, implements and tools of the village. The carpenter, the rope-maker, the oil-presser, the leather-worker and the shoemaker are likewise in request and supply the simple wants of the rural folk and of the agricultural industry. Female workers are employed in the fields for weeding, picking and reaping. But except in some provinces, ginning and spinning are no longer the regular domestic occupations of women as they were before the advent of machinery. Most of the craftsmen in the village are autonomous workers but they need assistants, and this kind of labour is hired, either by the day or by the year. In the old village organization, artisans and craftsmen were, so to say, public servants and were expected to supply their labour to farmers in return for remuneration given to them in kind according to a fixed schedule. This system prevails, to a certain extent, in villages even at the present day.[1] Slaves and serfs are frequently referred to in the Dharmashastras[2] and other ancient works, and the institution of serfdom continued down to recent times. In several parts of the country there are agricultural labourers who can be hardly distinguished from serfs. They are in the iron grip of the landlord who has advanced to them sums of money required by them to defray the expenses of marriage and other ceremonies. And as repayment of the debt is practically impossible, the labourers become attached as serfs to the estate of the master. They receive from the landlord-cum-money-lender a stated amount of food, clothing and cash per year and become hereditary serfs. The 'Padials,'[3] of the Madras and the 'Halis' of the Bombay Presidency are serfs of this type and under other names they are not an uncommon feature of village life elsewhere. Though these labourers are commonly associated with agriculture, that being the principal industry of the country, they are also found in other industries and in domestic service. 'Veth' and 'begar' or forced labour has now

1 See T. N. Atre's 'Gawa-gada' in Marathi.

2 Manu, VIII, 413–415.

3 Some South Indian Villages:—"A 'padial' is a sort of serf who has fallen into hereditary dependence on a landowner by debt. In almost every case the original debt was a sum of money borrowed by a landless man to solemnise his marriage or more frequently, that of a son or daughter, the borrower undertaking to work for the lender until the debt should be repaid in return for a certain [illegible] supply of food." See also Census Report, [illegible], Vol. I, page [illegible]

generally disappeared except where landlords can still play the village tyrants.

49 Organized Industries:—Even in Western countries where the factory regime is in full swing, we witness in industries what is called a 'regressive evolution'; and manual labour, assisted perhaps with improved tools, is often preferred to work done with the aid of machinery. In India, as a whole, the machine is the exception and manual labour the rule, in spite of the fact that in large centres like Bombay, Calcutta, Cawnpur, Ahmedabad and other towns, numerous factories of the modern type have been established. But there is an unmistakable modernising and mechanising tendency visible on all sides. Machinery driven by power is being installed in many petty towns and is fast displacing manual labour engaged in small industries. The operatives employed in factories have, of course, to do work of a different character from that done by those engaged in agriculture, the domestic industries and the handicrafts. Some of it is, indeed, highly skilled and its efficiency is considerable. The organized industries are connected, under the system adopted in the census report, with (1) the growing of special products, (2) the extraction of minerals and (3) the manufacture of material substances. Statistics relating to these have been already given on a preceding page. It may be noted that at the time of the census of 1921, in 15,606 industrial establishments in the whole of India, employing ten or more persons each, there were 26,81,125 workpeople in all, which is about 8 per mile of the total population. Of these 26·8 lakh persons, about 20 lakhs were men, and of them, more than 6½ lakhs were returned as skilled workers. Out of 6·8 lakhs of women only 57,500 were skilled. There is practically little skilled labour on the plantations; its proportion rises to 43 per cent. in textile industries and is over 50 per cent. in the metal and machinery workshops. Among skilled workers the ratio of women and men is 1 : 12; but it rises to 1 : 2 in work where special skill is not required. The proportion of children among unskilled labourers is one child to every seven adults. The highest proportion of women is to be found on the plantations, viz. 94 to every 100 men and there the children are nearly one-fifth of the total number of adults.

Most of the labour employed in the organized industries is drawn from neighbouring and even distant parts of the country.

Centres of industries, which are fixed by the proximity of the raw material or fuel, are not able to supply locally the large numbers of workmen needed, and in many cases, the local population does not possess the necessary aptitude and the desire for work. The tea plantations in Assam, the jute mills near Calcutta, the coal mines in Bengal and Behar, the iron mines and steel works in Behar and Orissa and the cotton mills in Bombay and Ahmedabad attract to themselves immigrant labour from far and near. Many of the workers have their bits of land, perhaps the common property of a joint family, and they return to their rural homes in the rainy season. They lend a helping hand to the folk at home in agricultural operations and on the close of the season return to their urban occupations. These migrations disturb the work of the factory and the employer is annoyed by the absence of so many hands at regular intervals. The operatives are not inclined to settle permanently in or near the towns, as their attachment to the native village is too strong for this and the conditions of urban life are not sufficiently attractive. Nor can they stick to their rural homes as they must go out to earn enough to supplement the scanty and precarious income yielded by the village land. This amphibious character of the Indian factory worker is an interesting feature of our industrial organization and possesses great economic significance. It means irregular and inefficient labour, the migration of the rural population from the free air of the country to crowded towns, the inability of agriculture to support large numbers among the rural population and the superior attractions of urban money wages.

It will be useful if we give details in connection with a few typical organized industries. The most striking illustration with reference to the organized production of crops is that of the plantations on which tea, coffee and rubber are grown on a large scale. The tea gardens, most of which are in Assam and Bengal (and only a few are in Madras and Travancore), employed in 1927, 8,66,996 persons of whom only about 67,445 were temporary hands. Assam, which is responsible for neraly three-fourths of the total number, draws its labour supply from the neighbouring provinces, the hill tribes taking a share in the heavy work. The proportion of women is very large and children are employed. Indian coal mines give employment to about two lakhs of workmen of whom more

than 50,000 are women and a little more than 1,400 are children. Over 60 per cent. of the labourers are employed in the mines in Behar and Orissa and are recruited from the adjoining districts and provinces. It is stated that 'for many miles around the coal fields many of the villagers follow a dual occupation, working in the fields in the season of planting and harvesting and cutting coal for the rest of the time.' Amongst the miners, that is, skilled coal cutters, the Santals are stated to be the most numerous and the most efficient. People of all tribes and castes appear to flock to the mines. The census report says that 'there is no sign of a class of hereditary pitmen divorced from agriculture coming into existence' and that 'to induce a family to settle, they must be provided with land for cultivation,' which is not possible in some of the coal areas. While, therefore, coal miners have tended to form a hereditary caste in England, there is a promiscuous mixture of castes and communities in the Indian mines. At the Jamshedpur steel works, the more highly skilled labour is recruited from distant parts but the ordinary labour is drawn from the neighbourhood and the Central Provinces while a good many of the Khalasis or the superior type of coolies come from Orissa and the neighbourhood of Vizagapatam. The Hos, the Santals and the Bumij, among the forest tribes, have acquired a good deal of skill in some of the operations of the industry. The cotton textile industry claims above 1,500 establishments employing 20 and more persons each and the number of workers is over 4½ lakhs. More than half of these are in the Bombay Presidency. The Bombay mill operatives are stated to be more skilful and intelligent than the Bihari immigrants into Calcutta and consist mostly of Marathas from the Deccan and Konkan, to a certain extent of Konkani Mahomedans and Julhais (Mahomedan weavers) and of a few men from Central India. The labour employed in the cotton gins and presses in Northern Deccan, Berar, parts of the Central Provinces, and in Central India, is, for the most part, local and seasonal and unskilled. The supply of fitters and engineers is fairly plentiful there and the same labour conditions prevail in the cotton areas of the United Provinces, the Punjab and Madras.

50 Traditional Training:—In the case of the old industrial arts, as we have pointed out before, there is yet much surviving skill and efficiency, but these have little scope for expansion, and

with a steady diminution in the demand for products of indigenous manufacture, they are slowly but surely disappearing. The need of new industries and of a modification of the forms of the old ones, is being keenly felt, and it has become necessary to adjust technical and industrial training to the changed circumstances. The traditional[1] method of industrial training in India is very largely similar to the apprenticeship of the Middle Ages in Europe. A craft, being hereditary in the family, is picked up by the boy from his father or an elderly relative or a master craftsman to whom he is apprenticed. A learner in India, be it of music, of handicrafts or of trade, must begin by doing very humble services in the house of the master and must proceed by slow stages, watching and being directed as he goes on. The pupil rarely pays anything for being taught and may earn something from his master as the latter receives assistance in his work. When the training is over, the apprentice sets up independent business or becomes a partner or a permanent worker in the master's shop.

This system answered well in the past, but it no longer suits the changed and changing economic conditions in India. The workmen are not thereby enabled to keep abreast of the times, the quality of their work has deteriorated and the products of their industry are fast being supplanted by imported articles. Except in a few cases, they can neither adhere to the traditional system nor avail themselves of the advance the world is making in improved mechanical processes. The bulk of Indian workmen are ignorant. They can not understand the changes that are taking place all around them and can not be expected to adjust their activity and skill to the altered environment. They are also extremely poor and their lack of means is another serious obstacle in their way. The handloom weaver is a typical example of this deplorable condition and it is a serious problem how to rehabilitate him. The duration and nature of industrial training must vary from industry to industry and from industrial grade to industrial grade. Most of the instruction requiring manual dexterity and the exercise of the imagination has been of a severely practical nature, received either in the home or at the place of a master craftsman. This method of training

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1 Ancient Sanskrit works lay down rules for the guidance of industrial apprentices and their teachers. See Narada Smriti, V. 15-19.

can not but prove unsuitable where improved processes and machinery are coming to be used; and greater productivity and new industrial operations require a different system of training, practical and theoretical.

51. Present Requirements:—It is inevitable that in the steady process of economic evolution now going on in this country, the hand workers should have to abandon their old callings and that improved and new industries should take the place of the latter. Their displacement from hereditary occupations to which they were born and bred, naturally excites sympathy but they can not be simply preserved as the relics of a bygone age in an economic museum. The young generation of the hand workers must be educated and trained in new methods and processes and must be taught to use improved tools and machinery. Only in this way can these classes of workers in India be enabled to keep abreast of the times and be efficient agents in the production of wealth. Even though they may cling to their particular callings allowed by caste prejudices, they may be given scope for improvement in those very callings and thus be enabled to make a living and stand outside competition. Or, they may be trained to work in factories where their inherited aptitude may be suitably developed into up-to-date efficiency. Workmen of this type do find employment in mills and factories and are able to earn high wages. They also can steadily rise to higher positions and become foremen and even managers and employers. This will certainly mean the transformation of autonomous workers into wage-earners. But failing the rehabilitation of craftsmen in a comfortable position, that alternative is preferable to stagnation and starvation.

In textile mills, mines, factories and railway workshops, a training suited to the different trades, is essential to make efficient workers, and in India as in other countries, honest, active and intelligent men are promoted to responsible and remunerative places. But in this country, the higher and the intelligent classes usually take to the learned professions and the too literary character of our education has created a large amount of unemployment among them. A number of technical schools do exist and some of their products secure employment in the factories. An adjustment between industries and technical instruction has not, however, taken place, and there are numerous young men who

have received technical education but fail to secure suitable employment, while there are several trades which will improve if more trained hands are employed in them. There is a popular demand for the establishment of technical institutes, large and small, in all parts of the country, and there is a complaint on the other side that the supply of trained men is already in excess, and that any addition to it must increase the army of the unemployed.

What is urgently required is the reorganization, reform and expansion of our whole educational system. The attitude of the different classes towards industrial occupations and their ideas of social status and relations will likewise need adjustment. As the hereditary occupations fail to yield a decent living, the youth of the country of every caste and community must be equipped for new careers. The diffusion of primary education, the starting of technical and industrial schools and the provision of mechanical training for factory operatives, must be undertaken on a liberal and comprehensive scale and nothing must be left to custom or to chance. The problem of national education has been or is being solved in Germany, Japan, England, Austria and America, but in India we have long drifted and even now when the lessons of the war in this connection are being taken to heart everywhere else, we are not moving sufficiently fast.[1] Each individual citizen must go through a suitable system of education, his faculties must be developed and the best that is in him must be drawn out to his own and the public advantage.[2] Technical scholarships are given by Government to qualified young men to enable them to acquire industrial training in western countries; and it is expected to do more in this as in other directions.

Social and political conditions in India have combined to create the unfortunate impression that education in schools and colleges

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1 See Viscount Haldane's paper on National Education in 'After War Problems' and an account of the German system of education in Earl Dean Howard's 'Recent Industrial Progress of Germany.'

2 "A factor which has tended in the past to delay the progress of Indian industrial development has been the ignorance and conservatism of the uneducated workmen. The evidence tendered by employers was almost universally in favour, of labour, both skiled and unskilled, that had at least received primary education. This is given in countries with which India will have to compete and is a *sine qua non* in this country also."—Report of the Indian Industrial Commission.

has only one goal viz. government service and failing it, some liberal profession. Prevailing middle class unemployment has opened public eyes to the gravity of this mistake and is supplying a much-needed antidote to the tendency to hanker after clerical and administrative posts. But as education spreads, even youths belonging to the agricultural and artisan classes are thrown into the service market, unemployment increases and old industries and trades are neglected. In this democratic age, caste and class distinctions are being obliterated, and while this is a desirable tendency, the present competition, reinforced by communal and caste feeling, for clerical, administrative and literary jobs is responsible for considerable waste of energy and misdirection of effort. This is indeed a phenomenon of a transitional stage in the nation's political and social development, but wisdom and statesmanship require that the situation should be boldly faced and a correct turn be given to our educational and public policy. The importance of careers in industry and trade must be emphasised and opportunities must be provided to the youth of the country to strike new paths of employment.

52. Technically-Trained Men :—The view is held by many that " if it is admitted that in every other country technical education has followed the organization of industries, or grown up alongside with them, and may be said to be the necessary complement to industrial efficiency, it is obvious that in a country where few industries are established, the wholesale education of Indians could only result in an excess of young men trained up for posts which do not exist, and for whom no suitable occupation can be found." Employers of trained labour likewise assert that the men produced by the technical institutes are not suited to the kind of work they are expected to do in factories. The men, it is said, want high salaries, even from the very start, and are averse to working with their hands. They are, therefore, condemned by the employers as unfit for the work for which there is a demand. For the higher kind of work they are not wanted and for the lower grades of labour for which there is a demand, they are not suited. This is the burden of the criticism which employers had to make to Lieut. Colonel Atkinson and Mr. Dawson who were deputed by Government to make an inquiry into the subject years ago, and the situation does not appear to have materially altered since then. The complaint extends to the sons of artisans

who receive an education beyond the primary stage and it is stated that the spread of education among the artisan classes tends to bring manual labour into contempt, leading the young men to forsake their family callings in favour of clerical work.

Opposed to this view is the other according to which employers of labour in India have a strong and by no means an unselfish prejudice against technically trained men and that they want to employ low-paid workers. Even in western countries and under modern industrial organization, specialized operations have become, as it were, the economic functions of castes and the tendency is being strengthened by trade union regulations. Employers state that in order to be an expert maker of steel, paper or tinplate, a man must be born to the trade or in any case, he must enter it as a child and must grow in it. There are two chief grades of men that must be considered here, (1) those who work with tools and tend machines and (2) the foremen and supervisors. The products of technical institutions aspire to join the ranks of the latter. It is contended that for them "even in existing conditions the field for employment is large if the exclusiveness of some of the employers is overcome," and that "the growing mills, the business houses, the banks, the engineering firms and a host of other special institutions that could be named could employ for years to come almost all the material turned out by the technical institutions, either now existing or which may be started in the course of the next few years.[1] The ultimate economic advantage of employing intelligent, trained workers is not appreciated by employers who are carried away by the immediate cost in rupees, annas and pies. The tendency noticed among artisans' sons when educated, to treat manual labour with contempt and to prefer clerical work, wherever it is seen, is correctly attributed to the wrong system of education under which they are brought up and to the wrong social ideals that are placed before them.

53. Prospects:—On railways, and in mines, mills, factories and workshops, there is undoubtedly a growing demand for trained men and in several of them the relatives and the children of the workers are trained. The inhabitants of certain provinces and the

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1 See report on the Inquiry concerning the employment of technically trained Indians, referred to on page 165.

members of particular castes are declared to be peculiarly fitted by nature for skilled factory work and for technical education. Members of the artisan classes are preferred by employers, and as a matter of common practice, "the men required in the textile industry were men recruited from the lower classes and educated up to about the middle standard—men who were accustomed to hard work by tradition and had not been spoilt by too high education." Employers express their readiness to take up apprentices if young men of the right type are willing to learn under the conditions offered, and suitable provision may also be made for technical education in special schools or institutions attached to factories. But they are not enthusiastic with regard to this subject and have no regular schemes for admitting and training apprentices. Employers do not naturally like to open their doors to men who will run away after being trained or will expect treatment which can not be extended to them. But large-scale industries can not be successfully carried on in India for a long time if they are to depend on imported labour in the higher ranks. The new school of railway transportation which has been recently opened at Chandausi is intended to provide practical training, by means of periodical courses, to the subordinate staff of railways, in actual train, station and yard operations. This is nothing compared to the needs of the situation, and the work will have to be done on a much bigger scale; and Indianization is required as much in our industries as in the government services.

The spread of elementary education is the first need of the country, and that system must be linked up with general technical and special industrial education. With intelligent and trained labour several of the existing industries may be improved and rendered profitable, while the efficiency of new and modern ones may be materially increased. The beneficent effect of elementary education upon the efficiency of labour has been admitted on all hands.[1] For the higher grades of workers a little more education and actual experience in factories combined with technical training, is needed. And as to the work of supervisors, managers and organizers, technological institutes of a higher type like the Victoria Jubilee Technical Institute in Bombay and special schools and colleges like

1 Indian Industrial Commission's Report, Page 109.

the Cotton Institute and the School of Mining at Dhanbad are obviously necessary. Men so trained must also get scope for the use of their education and ample opportunities for rising to higher positions in industries. At the present stage of economic transition, the adjustment of training to the varied industrial requirements is certainly a difficult matter ; and determined efforts must be made both by Government and employers to provide it in suitable ways.

In agriculture too, special training will go a long way to improve the efficiency of the farmer.[1] Agricultural colleges supply a definite want, but education in the broader sense of the word will have to be spread among the actual peasants, and provision is being made for this by the starting of vernacular agricultural schools for the sons of cultivators, notably in the Bombay Presidency. The Agricultural Commission has, however, emphatically condemned this kind of vocational school e. g. at Loni, on the ground that it is unduly expensive and that there is no real demand for it, while it has favoured other types, particularly the Punjab system. The common agriculturist does possess great skill but this industry can not be made more remunerative and productive unless he knows how to apply improved methods of farming. Demonstrations organized by the Agricultural Departments and associations, regarding the efficiency of improved methods, manures and implements, are producing some beneficial effect upon the condition of farming, and greater efforts in this direction are obviously needed. Specialized training in forestry, navigation, naval architecture, sericulture, fishery and metallurgy has similarly to be provided for in suitable centres. The technical institute at Jamshedpur which trains educated youths for careers in the steel industry is a significant effort the value of which must be widely understood. Two to three

1 "Skill, that is to say, practice and a certain amount of knowledge, is required by the man who drives a plough or cart or who sows or reaps or irrigates or weeds; and this skill is acquired in a very high degree by the cultivator's children as they help their father and learn from him. But the art of agriculture has to move with the time just as handicrafts must move: new crops have to be grown and old crops given up, new methods, new tools and new implements are required in order to secure the greatest possible production from the land; and the cultivator can not teach his sons about those things which he does not know himself. And so arises the need for some kind of education which shall teach the cultivator's children the new knowledge they require without interfering with the training they receive from their fathers."—W. H. Moreland: An Introduction to Economics.

thousand applications are annually received for admission there whereas the places to be filled are barely two dozen.

54. Supply of Labour:—We shall have more to say concerning the condition of labour, urban and rural, in a later part of this book. Here we shall notice one or two points only with respect to the supply of Indian labour. The general complaint about the shortage of labour on the part of employers, has been already noticed. Like the Black Death in England, the Plague has taken a heavy toll of the lives of the working population during the past thirty years. A single visitation of influenza carried away, in 1918–19, no less than one crore of persons, chiefly from among the working classes. These epidemics, along with malaria and other diseases which have made permanent homes in the country, have produced big breaches in the ranks of labourers. A difficulty appears to be experienced everywhere by employers of different kinds of workmen in securing an adequate and suitable supply of labour. But the fact that workers are not readily available or available at the old rates of wages, ought not to be taken as an indication of any real shortage of unskilled labour in the country taken as a whole. The labour of artisans such as mechanics, fitters &c. is, of course, scarce, and competent foremen and supervisors are hard to secure. But the potential labour supply is unlimited.

And here we are confronted with the paradox that while thousands of coolies have emigrated to distant colonies as indentured or free labourers, milliions of the population live a life of semi-starvation, unemployment is stated to be chronic among large classes ; and employers in Indian mills and factories have been complaining of a scarcity of labour. But the circumstances in which the emigrants go thousands of miles beyond the seas are now only too well known; and after all, their number is a drop in the ocean when it is compared with the total labour supply in India. In the first place, the rising prices of food grains and other necessaries, must make labour dearer, and employers have no right to expect workmen to be satisfied with the old rates of wages. Secondly, though it is not easy to induce the ignorant Indian labourer to move out of his village and seek employment at distant places, the prejudice against migration is seen gradually disappearing. About ten lakhs of Indian labourers are to be found working on the plantations of the various British

Colonies, and thousands migrate from one province of India to another. In the big provincial cities one meets with adventurous people belonging to different parts of the country, engaged in a variety of occupations, and this 'invasion' of one province by the inhabitants of another is marked in Bombay and in Bengal and particularly in Calcutta. New industrial towns like Jamshedpur are truly cosmopolitan; and economic necessity appears to exercise as powerful a unifying and nationalizing influence as the political. The old local equilibrium between demand and supply has been disturbed almost everywhere, and labour can no longer be obtained on terms to which employers have long been accustomed and which they are naturally reluctant to raise. The allurements of the town and the city, draw off a growing stream of labour from the rural parts for the major portion of the year, and it bears the stamp of provincial and caste peculiarities. In his report on British trade in India, Mr. Ainscough refers to the 'startling fact' that in a country with a population of over 313 millions, whose standard of living is extraordinarily low, there should be a dearth of labour for new ventures, and explains that it is difficult to obtain a permanent industrial class attached to one industry from father to son out of a population of cultivators of land.

The problem of labour supply in India is not really one of deficiency but rather of excess. The view we have expressed regarding the pressure on land, finds ample confirmation in the conclusions of the Royal Commission on Agriculture in India, relating to the supply of agricultural labour. It says :—"In no province except possibly in Assam, is there any indication of a serious general shortage of labour ...... in a belt stretching from the Madras Presidency, east and north through Bengal, Bihar and the United Provinces, the problem is definitely one of superfluity......" It agrees in the opinion of the Famine Commission of 1880 that "the numbers who have no other employment than agriculture are greatly in excess of what is really required for the thorough cultivation of the land," and feels that with an increase of more than two crores in the rural population during the thirty years ending in 1921, the above observation is even more pertinent to-day than when it was made. No wonder the Agricultural Commission recommends that all restriction on the free movement of labour in India, with special reference to recruitment for the Assam

gardens from certain parts of the United Provinces should be abolished as soon as possible. The Commission then discusses the possibilities of overseas emigration and concludes that apart from Ceylon and British Malaya, British Guiana alone offers scope as a hopeful outlet. Emigration of "assisted" Indian labour is now strictly controlled by the State by the Act of 1922 in the interest of the emigrants.[1]

55. The Depressed Classes:—From the nature of the sources of labour supply, which India's big organized industries are tapping, it is clear that the potential reserves of the country are immense and are to be found, besides the ordinary unemployed agricultural population, among the wild tribes, classes known as the depressed and the untouchables and the people that lead a vagrant life and subsist on mendicancy and crime. For centuries, these have been relegated to a condition of hopeless degradation and demoralization, and on account of the strong religious and social prejudices against them—the result of historical causes—they could not be counted upon to man the labour force which is required to carry on new industries started all over the country. Standing on the lowest rung of the ladder of the Hindu society, the untouchable classes have no religious scruples which hamper the migration of the higher castes to distant provinces and abroad and which may forbid them to do work regarded as mean and degrading. Large numbers of them, therefore, go as coolies to Ceylon, Burma and Federated Malay States. Among these classes, we have an unlimited potential source of labour power and as their number is estimated in the latest census report at 5½ to 6 crores, which is one-sixth of the total population of the country, Indian industries need not suffer from a shortage of workmen. Caste prejudices against the employment of these people who have little scope for honest work and opportunity to imporve themselves, will die out and ought soon to die out, and economic

1 Indians resident overseas but within the limits of the British Empire (the number of residents elsewhere is estimated at about one lakh), are distributed thus :—

Ceylon ...	8,20,000	Trinidad ...	1,26,000
British Malay,	6,60,000	British Guiana...	1,35,000
Mauritius ...	2,74,000	Fiji Islands ...	61,000
South Africa...	1,61,000	East Africa ...	55,000

forces will combine with humanitarian and patriotic considerations to prevent so much human power from going to waste.[1]

The movement of political reform which has gathered great force since the outbreak of the war, has compelled public attention to the rights of the suppressed and the fallen and to the question of the uplift of the depressed classes. As their disabilities are steadily removed, they will make an increasing contribution to the labour power of the country. Their sense of self-respect has been roused and there is to-day an upheaval among the depressed classes all over the country, their representatives being nominated to municipal boards and legislative councils. The members of the depressed classes who are shunned by high class people, are found to become respectable domestic servants and operatives and to do work that requires intelligence, perseverance and trustworthiness. To-day they are in an extremely wretched condition, their habits are filthy and their surroundings are forbidding. Several of them, however, have been the traditional servants of the village community and are characterised by honesty, sturdiness and physical endurance. Some of them have lands given to them in return for village service and are thus cultivators. Others earn a living by doing stray jobs, and making ropes, baskets and so forth. Tanning and curing hides gives employment to some, while others work as scavengers. The work of uplifting them, which is being carried on by philanthropic bodies and social reformers, has an obvious economic significance. Both justice and economic needs require that the depressed classes should be raised from the slough of degradation and demoralization into which they have been allowed to fall. The old system of specialization under which the caste of a person

1 The following statement shows the approximate numbers of the depressed classes:—

DEPRESSED CLASSES.

(000's omitted)

Assam	2,000	Baroda	177
Bengal	9,000	Central India	1,140
Bihar & Orissa	8,000	Gwaliar	500
Bombay	2,800	Hyderabad	2,399
C. P. and Berar	3,300	Mysore	932
Madras	6,372	Rajputana	2,267
Punjab	2,893	Travancore	1,260
United Provinces	9,000		

Total: 52,680

determined his profession, is slowly giving way before the advent of the new regime, and the old barriers of caste and prejudice being removed, all people must get opportunities to better their social and economic position, by doing work for which they are fitted.[1]

Owing to the administrative and economic changes which are taking place in the village organization and public life, the untouchable classes are fast losing their traditional employment. If they are, therefore, given education they can be made to take a share in the new industrial organization by working in mills, factories and workshops. Non-Hindus, particularly Europeans, freely employ members of the untouchable classes, as domestic servants; and when the servant problem is becoming more and more difficult every day, relief may be found in this direction. A Mahar, a Chamar or a Mang, branded with untouchability in the Hindu community, of which he is a nominal member, attains respectability when he enters the Christian fold into which he is readily welcomed. The loss caused to the numerical strength of the Hindu community by conversion to other faiths, has recently combined with political and economic motives, to strengthen the movement in favour of the uplift of the depressed classes. Besides these classes, again, there are hill and forest tribes and tribes known as 'criminal', scattered all over India. The former of these live out of the pale of civilization but they have recently shown a tendency to leave their native hills and forests for the plains. Their total number is put down at 16 million souls; and about 6 million out of them have become Hinduized tribes. The criminal tribes lead a vagrant life and are a menace to the peaceful population of our villages. The work of reclaiming these people has been recently undertaken by Government, and missionary effort is also in the field. These men must be weaned from their immoral and criminal habits and be made to live useful lives. They ought to be taught certain trades so that they may become useful members of society instead of parasites and habitual criminals. These tribes consist of different castes with a history and characteristics of their own. The Chhaparbands were once given to manufacturing false coins, but are now earning an honest livelihood.[2] Then there are the Bhamptas who were given

1 See page 74 above.

2 See Atre's Gawagada in Marathi.

to the commission of thefts on the railways. The Gujarati Bhats who were also thieves and the Haranshikaries which committed robberies are now, along with others, working in mills as ordinary labourers. There are other wandering tribes which are a nuisance and a menace to peaceful society and they must be reclaimed. How ample is the scope for efforts in this direction, may be realized from the fact that only about ½ per cent. of the total criminal tribe population in India, reckoned at 4 millions is at present under instruction and that of the aboriginal population, approximately 1½ per cent. is at school.[1]

56. Economy of Labour Power :—There is a large amount of labour power, actual and potential, which may be thus utilized to the immense advantage of the country. Some of the classes who at present contribute little to wealth-production, have been referred to above. There are several besides them who live by the profession of begging. With them it is a hereditary calling, and they think they can not do and ought not to do anything else. Indians are a deeply religious and an extremely philanthropic and charitable people and very often it is not a discriminating charity they practise. This piety and the widely prevailing prejudices are exploited by many a mendicant who does not regard begging as disrespectable. The mendicancy takes various forms, more or less associated with the religious ideas of the people. Most of the mendicants do not know the dignity of labour and pretend to feel offended if they are asked to earn their bread by the sweat of their brows. Some of them are not above thieving and other crimes too. The so-called Sadhus who go about from one shrine to another and live upon the industrious, are a great problem. The idle lives led by monks and priests, have provoked a revulsion of public feeling in all countries and the abuses of poor relief in England are well-known. The drones who live on the piety, credulity and charity of villages and towns, will steadily find their position getting more intolerable in the struggle for existence which is becoming keener everyday; but to-day, they represent so much wastage of labour power. How to improve the Sadhus and make them useful members of society, is a question which is being tackled by Hindu Sabhas and conferences. It is a very large and difficult problem and must be boldly faced by the community.

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1 India in 1920.

Caste restrictions which prevent persons from taking to a trade to which they are not born, also involve waste and loss of efficiency. Supply of labour does not readily respond to demand, and the productive power of the country suffers. Occupations which, in other countries, are indifferently pursued by all persons, are, in India, confined to particular castes, and are looked down upon as inferior and debasing by others. The exclusiveness and pride of caste are so strong that workers belonging to a social group or sub-section, feel degraded if they are called upon to take to a trade followed by others. Mahomedans and other non-Hindus are not, of course, hampered by such restrictions, and they are seen easily adapting themselves to the situation. But as we have observed before, caste distinctions are gradually becoming less rigid in the economic sphere, where disturbing and dynamic forces are leading to individual freedom and emancipation from caste control, though socially the restrictions are still effective. The employment of women and children in organized industries is surrounded with risks and has to be strictly controlled and regulated. Women in India take their share of manual work in agriculture and the cottage industries; and it will be a valuable accession to the labour power of the country if their assistance is secured on a larger scale, with proper safeguards provided. Social customs in India are indeed restrictive in this regard but it is doubtful whether imitation of the West here will be beneficial to the community in the long run. It is an unwarranted exaggeration[1] to say that the women of India, taken as a whole, do not make their proper contribution to the flow of economic life. As a matter of fact, they are efficient help-mates of men folk in rural and urban areas and actively participate in outside as well as domestic work.

The substitution of machinery for manual work is another source from which, through the economy of labour power, what practically amounts to an accession to the ranks of operatives may be looked for in an increasing proportion. Machinery and improved tools will set

1 "There is a vast waste of female labour. due primarily to custom and prejudice. In most other countries the proportion of female labour to the whole is high; while its efficiency is equal to the tasks performed.........The Punjab discards what in England and elsewhere is an absolutely necessary element in the maintenance of their civilization. The fact that there are tribes, such as Brahmans and Rajputs which do not allow their women folk even to work in the fields is alone sufficient to explain their poverty".—Calvert: "Wealth and Welfare in the Punjab."

free for employment much of the labour now engaged in heavy, unskilled and exacting work. A machine driven by steam, gas or electricity, does as much work as a number of human workers and this constitutes a distinct saving of labour and a measurable gain in productivity. The oil and flour mills, the pumps for drawing up water, the sewing machines, the sawing and husking mills, the power looms and a host of other mechanical appliances are fast displacing manual labour and are thus adding to the supply of labour power. The use of machinery has its disadvantages; but the compensating gain in a country which wants a larger production of wealth and the promotion of material prosperity is an important consideration which must be given due weight. It must also be borne in mind that while displacing labour in one direction, machinery creates demand for it in others.

57. Adaptation to Needs:—Labour is a primary and active agent of production, and the advance of human civilization has meant a progressively economical use of that factor. We shall show, in the next chapter, how the productivity of labour is facilitated by the employment of effective aids in the form of tools and implements. A given amount of physical power will yield more work when exerted in collaboration with the above instruments and the forces of nature on various raw materials. From the flint and the bow and arrows used by the savage to the most powerful and delicate machinery driven by electricity, which supplies necessaries and luxuries to the civilised man of modern times, there has intervened a continuous course of adjustment of labour to expanding needs. To make labour go the farthest in wealth-production, is the essence of material progress, and consequently careful training in new economic methods of work is a condition of improvement. The Indian labourer can no longer be content with working at the old-world instruments,—the wooden plough, the spinning wheel and the hand-loom of the ancient pattern, the potter's wheel, the grinding stone-mill, the bullock cart, the leather water-lift and the wooden oil-press. Improved models of these or altogether new modern implements and machinery have to be used, and the workman has to get himself trained in their manipulation.

Increase in the quantity and the variety of goods consumed gives rise to and necessitates the minute division of labour into numerous industrial operations. The ordinary craftsman in India is

still responsible for the production of a commodity in all its parts and through all its stages. And, as in agriculture so in handicrafts, there is not much room for division of labour. But in large-scale industries, operations are split up and specialized, and skill in performing them has to be specially acquired. Hence the necessity of technical and industrial training. Even in cottage industries which are well organized, division of labour is practicable and useful, e. g. the toy-making industry in Germany where families and whole villages are engaged in particular operations involved in the manufacture of dolls, for instance. This brings out the fact that labour efficiency is enhanced by improved industrial organization. It is found by experience that the educated and the trained worker is more efficient than one who is ignorant and untrained. Industry requires different kinds and grades of skill and capacity in the workmen, and there must be provided corresponding courses of instruction to suit them. Technical education has been defined as "instruction in the principles of science and art applied to industries, and in the application of special branches of science and art to specific industries and employment"; and industrial education is intended to secure "the development of ability and skill in the handling of materials, tools, machines and products." Industrial progress requires both kinds of education to be imparted to the young generation; and special institutions have to be established for the purpose to suit different conditions and needs.

This aspect of economic development has so far not received the attention it deserves, and there has been practically a divorce between education and industry except for the practical home training that is available by the old method of apprenticeship. Skilled artisans like carpenters, blacksmiths, plumbers and masons; workers who will be responsible for supervision in factories and work-shops such as chargemen, foremen, and inspectors; and managers, superintendents, engineers, chemists &c. will have to be given theoretical and practical education in suitable institutions and ways. Colleges, schools and workshops will have to be provided by the State if Indian labour is to gain the efficiency so badly needed for the development of industries in the country and the economic improvement of the people. Mining, metallurgy, forestry, pottery, textile industry, chemical industries, mechanical and marine engineering[1] as also small industries and

1. See Report of the Indian Mercantile Marine Committee.

handicrafts will have to be attended to as special branches. Agricultural education of the advanced and the primary types is, of course, indispensable for increasing the efficiency of the farmer class and improving the industries subsidiary to agriculture e. g. dairying and poultry-farming. Not only large factories but home industries are expected to derive benefit from facilities afforded for industrial education. The acute unemployment which at present prevails among the educated classes, is due to maladjustment of supply and demand and can be remedied only by adaptation. Committees which have recently investigated the problem of middle class unemployment in different provinces, could come to no other conclusion.

58. Comparative Efficiency:—It has been already stated that labour efficiency depends on and is measured by its comparative cost in relation to the production of a unit of wealth. Economists and men of business are accustomed to show how this efficiency varies from country to country, how the difference is caused by the variety of conditions with reference to climate, race, food, education, industrial equipment and so forth and how, for instance, the British workman is more productive, in spite of his higher money wage, than the continental worker and how the American is superior to both. This comparative efficiency [1] may be illustrated by stating that if the work of an English labourer in a certain unit of time =100

that of a	French, a Belgian and a German...	=75–90
,, ,, ,,	South European ...	=60–85
,, ,, ,,	healthy and strong Indian ...	=40–70
,, ,, an	ordinary and weak ,, ...	=25–40

In the textile industry, each worker looks after spindles as follows :—

In	France	1	Worker	=	14	spindles
,,	Russia	1	,,	=	28	,,
,,	Prussia	1	,,	=	37	,,
,,	England	1	,,	=	74	,,

This relative intensity of labour is admitted without much dispute. With regard to the efficiency of the Indian workman in modern organized industries, we are in a position to quote the

1 Karl Diehl: *Theoretische Nationalokonomie.*

recent testimony of foreign expert observers. Two German representatives of the International Union of Textile Workers who studied the problem of Indian labour on the spot, have recorded their conclusions[1] on this point, which it will prove useful to summarise here. That in no large-scale industry in India has labour attained the height of German or English productivity, is indisputable. But the question is what is the relative Indian efficiency? In the steel works of the Tatas, that efficiency is not less than two-thirds of the productive capacity of European workmen. This inferiority is possibly partly due to the fact that the labour-saving devices common in German and Belgian steel works have not been set up at Jamshedpur. In the wagon-building factories and railway work-shops Indian efficiency is almost equal to the European. The opinion usually expressed that in the textile industry, the Indian worker is only one-third or one-fourth as efficient as the English operative, is exaggerated. Camparisons are here difficult owing to differences in the conditions of work and the methods of calculation. Because three Indian labourers are employed to do the work which one English labourer performs, it does not follow that they *must be* so employed—probably it pays the employers to do so on account of the low rate of wages.

The important point must be made here that comparisons of efficiency will be vitiated and misleading if the relative wages of Indian and European labour are not duly taken into account. The wages in India are often only a third of the remuneration of English workmen for the same class and quality of work. If the Indian operative turns out less work, he is paid less in proportion. He is not, therefore, too dear for his wage, nor is he cheap. The comparatively low efficiency in India must be attributed to hot climate, illiteracy and lack of discipline and training and of sufficient nourishment. That this efficiency will materially improve with the removal of the above obstacles, admits of no doubt.[2]

59. Conclusion :—Judged by modern standards, Indian labour is undoubtedly inefficient. A high degree of efficiency is indeed to be seen in autonomous workers, rural and urban, but even these betray a most unfortunate lack of ambition, forethought

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1 Schrader—Furtwangler: *Das Werktatige Indien.*

2 See the Author's "*Economics of Protection in India.*"

and continuous industry. Their work is intermittent and curiously freakish, and therefore, on the whole, much less productive than it need be. The average labourer who works in modern factories, goes to towns and industrial centres only during certain seasons and can not consequently pick up that efficiency which it is possible to attain only by unremitting and devoted work. That the factory worker has a rural home to which he repairs for a time in the year is, from one point of view, an advantage but, from another, it is a handicap.

Another characteristic of Indian labour which militates against efficiency is the deep-seated habit of most workers to be content with the standard of life to which they are accustomed. Excepting workmen who have their mental horizon widened and their aspirations roused by a taste for material and intellectual comforts by residence in towns, the bulk of labour is unenterprising, unambitious and unresponsive. The social disorganization which has taken place during the last hundred years, has aggravated this tendency though the same factor is calculated to act as a leaven to raise the mass of the population to higher levels. As it is, the average labourer will not, to the great disappointment of his friends and wellwishers, work hard to earn more, to save and to better his condition. He will simply not exert himself unless driven to do so by dire necessity and will take no thought of the morrow. While working, too, he will not put his whole heart into the job, and costly supervision becomes a necessity.

This lethargy and demoralization are reflected in the chronic indebtedness of the lower classes of the community. The labourer will borrow even for his necessaries and pledge his trinkets and mortgage his land and thus ruin himself when it is possible for him to earn an honest and decent living and keep his head above water. There can be no labour efficiency until the worker aspires to become independent, to raise his standard of living and bring up his childern to remunerative employment. Education is calculated to inspire the masses with ambition, to make them realize their deplorable condition and to urge them to steady effort to improve their lot in life.[1] We shall deal with the condition of labour from the points of view of distribution and con-

1 This view is supported also by the Royal Commission on Agriculture in India.

sumption in subsequent chapters, and it is sufficient here to indicate the most striking features so far as efficiency and productivity are concerned. It must now be clear why outside observers do not regard "cheap" Indian labour as a serious factor in the industrial competition that is going forward between this country and other nations.[1]

One important point needs to be emphasised at the close. The efficiency of labour is not to be sought in order to place the workman in the hands of the capitalist as an effective means of amassing riches. Labour efficiency is primarily intended to redound to the worker's own benefit by enabling him to be a better and a happier man. It is true that a cultivator who is driven by necessity to leave the healthy surroundings of his rural home to become an operative in a coal mine or a steel factory, does not necessarily improve his condition. A village craftsman migrating from his cottage to a textile mill, exchanges independence for a wage contract. The old artisans, craftsmen and peasants, therefore, deserve every attention; and for years to come, India's cottage industries will be there in any case. In the race for modern manufactures, they can not be forgotten or sacrificed—they will have their place in the social economy of the country. National interest itself demands that they should be rehabilitated and that their condition should be improved. They give employment to the bulk of workers in India, whatever progress organized industries may have made, and this state of things will continue for years. The glaring fact, however, can not be lost sight of that our rural workers—peasants and craftsmen—can not to-day maintain themselves and the rest of the community with the products of their labour and it is only a readjustment of economic life and reorganiza-

1 "The result is that the dignity of labour and even self-respect is lost and there is little hope of improving his lot unless the conditions of life are radically changed......The Indian, whether it be on account of climate or other reasons, never works for the love of work, as the Chinese does, and consequently, having made a close study of conditions in both countries, I have come to the conclusion that we can never expect the same excellent results from Indian labour as we have seen in the shipbuilding yards of Hongkong and the factories of Shanghai from Chinese labour."—Mr. T. M. Ainscough's Report on the conditions and prospects of British Trade in India.

tion of industry that can save people from a lower standard of living. Herein lies the great importance of increased efficiency of labour and the resulting augmentation of the nation's productive capacity.

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CHAPTER VI

CAPITAL

60. What is Capital? :—It may be imagined that all that is essential for the production of wealth is the material and the forces provided by nature and that man has only to work with these to acquire or to create the objects required for the satisfaction of his wants. A little reflection will, however, show that besides nature and labour there is a third factor present in the act of wealth-production, the most primitive forms of which presuppose the use of weapons, instruments and tools, however rude they may be. The savage needs the bow and arrows, sharp-pointed flint or bone or the wooden pole in hunting game, making fire and fashioning garments from the barks of trees. The crudest husbandry requires some thing to scratch the soil with, and though the sun gives heat and rain supplies moisture, the harvest has to be gathered and made fit for human consumption with the aid of some suitable objects. Now, the tools used to facilitate the creation of goods which are calculated to satisfy the wants of man, constitute 'capital,' the third factor of production. It may seem a little odd that crude weapons and tools should be honoured with that name with which gold and silver money and the industrial equipment of civilized society are commonly associated; but the most ponderous or the most delicate machinery and the imposing structure of our modern factories are, in essence, nothing but aids to wealth-production, though they are more elaborate and refined than the tools of the primitive man.

The creation of wealth is the creation of utilities, and it involves activity intended to secure a surplus of satisfaction by augmenting utilities and diminishing costs consisting in labour. It is, therefore, the function of capital to assist labour to execute a task with greater ease or to increase its output with the same expenditure of effort. In the gain thus achieved, lie the productivity of capital

and its importance to economic development[1]. Though it is itself produced by human labour, it will be realized that capital, whatever may be its form or size, is a distinct factor in the creation of wealth and the industrial development of a community rests materially upon the quantity and the quality of the capital it can command. The peasant, the weaver, the potter, the blacksmith, the carpenter, the shoemaker, the tailor have, all of them, to provide themselves with that pre-existing requisite without which their trades would be impossible; and the higher and the more complicated the organization of industries, the larger is the quantity of capital required. The handloom of the weaver, the wheel of the potter and the plough and the bullocks of the farmer, constitute their capital; but some thing besides the tools and implements is necessary for their work, and that is only another form of the same essential of production. The yarn, the clay and the seed required by the weaver, the potter and the cultivator respectively, are known as 'circulating capital'; and while they are consumed when they are once used, capital in the other form is called 'fixed' capital because though it steadily wears away, it endures through repeated operations of production. Owing to this very characteristic, fixed capital, consisting of machinery, tools and factory buildings, costs more to start with but it turns out to be more productive in the long run. Spinning and weaving with the hand on the wooden wheel and loom are simpler and less expensive operations, but they are less economical and productive than the corresponding mechanical appliances and processes assisted by steam or electricity. Printing is more cheaply, expeditiously and neatly done than writing with the hand. Instances of the productivity of capital may be easily multiplied.

Capital consisting of raw materials such as cotton, coal and iron, of tools and plant and of steam or electrical power will naturally vary in kind and quality with the class of goods it is proposed to produce, and each particular set of these, together with the special conditions in which the productive operations are carried on, constitute what is called an industry. Power may be said to be common to all industries alike, but labour, raw materials and

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1 "The productivity of capital consists in the aid which it renders in securing the same results with less effort. It is an adjunct to human labour and to that extent lessens labour by interposing something between labour and its result."—Seligman.

machinery are specialized in each of them in varying degrees. Wealth is ordinarily produced more with a view to its being exchanged than for direct personal consumption. The element of time also is of some importance in wealth-creation, the processes of which may be of short or long duration. The farmer must wait till the seed he has sown grows into a harvest and he can exchange the product of his labour for such articles as he needs for consumption. He has, therefore, to equip himself not only with implements and seed before starting agricultural operations but with food and other necessaries that will keep him going while engaged in his work. How is all this capital created ? If man used up or consumed all that he produced or obtained in exchange for it, there would be no surplus and therefore no capital to assist in wealth-production. Capital is generally handled in the form of money which is, however, ultimately used for securing goods essential for the creation of wealth.

61. Supply of Capital:—Capital is thus the result of saving and presupposes abstinence from immediate consumption. It suggests a surplus of income over expenditure, and thrift. The farmer sets aside a part of the grain he produces, for food, seed and for buying manure and for paying wages to labourers; and these constitute his capital. If he is poor or extravagant, he may have to borrow these from the village money-lender and he will have to repay the amount and, in addition, to pay interest upon it. But the grain which the money-lender has lent for sowing or for maintaining the cultivator while at work in the field, has been saved by the former out of his earnings. He might have consumed everything that he earned and would thus have laid by nothing. In that case the money-lender would have had no capital to lend. The weaver has a handloom in his house. But the yarn he requires is perhaps supplied to him by the money-lender, and for his daily food also he may depend upon loans. The handloom itself may have been borrowed or purchased out of savings. Thus he carries on his trade on capital borrowed or owned. But it is possible for a weaver or a cultivator to produce more than he spends on the maintenance of himself and his family and upon the purchase of raw materials and tools; and the surplus may be utilised in buying better tools and more raw materials. Such employment of capital increases efficiency and output and leaves a larger surplus which may

be used for the improvement of the standard of living and of industry. The supply of a sufficient quantity of capital is, therefore, a necessary condition of the productivity of industry; and the economic condition of a community is satisfactory or otherwise according as the supply of capital is abundant or scanty, and cheap or dear.

Modern economic progress has been rendered possible by the use of machinery and power and the application of scientific methods to production, which means the employment of large quantities of pre-exisiting wealth, that is, capital, going hand in hand with invention and improved organization. Industrial advancement in India is conditioned by the extent to which in agriculture as well as in manufactures, more efficient means are employed to produce wealth. Agriculture is the basis of several industries, and apart from the fact the increased productivity of its operations will yield larger quantities of food and raw materials, it will have a stimulating economic effect all round. It is notorious that the yield per acre of Indian crops is one-fourth to one-half of what it is in advanced countries. Thus while hardly 100 pounds of ginned cotton are obtained per acre in this country, an acre gives 200 pounds in the U.S.A. and 450 pounds in Egypt. In the quality of the crops also India is much behind other countries.

Nature is not niggardly in India, on the whole. The soil is capable of yielding all kinds of raw materials in abundance and the mineral resources are sufficiently varied and large and there is a teeming population waiting for work. And yet the country is poor and the people clamour for food and clothing! There is a scarcity of capital on all sides, and this lack of life-blood has reduced indigenous industrial enterprise to an anæmic condition. What wonders capital can achieve, is demonstrated by the few flourishing large-scale industries we have in India, e. g. cotton and jute mills, iron and steel works and tea plantations. The leading nations of the West have an annual surplus of millions to be lent to needy peoples abroad, and the remarkable thrift and the large savings of the French peasantry are well-known. Capital is pouring into new colonies like Australia and the undeveloped countries of central and south America. In India, on the other hand, there is not much capital to speak of because there are no savings, the surplus if any,

being small; and savings do not appear to be possible to any appreciable extent because there is no capital to put life into the industries. The big organized industries do attract some capital, but the smaller ones and agriculture very little. The question of the supply of capital, therefore, calls for a detailed examination with a view to find out what are its sources, why it yields such poor results and how the obstacles in its path may be removed. Capital is associated in the public mind with big industrial and commercial enterprises whose demands and yields are impressive. But the capital needs of agriculture and the smaller industries are equally if not more important and pressing. Our enquiry will also have to extend to the craftsman and the merchant so as to cover the whole field of capital operations.

62. Capital in Agriculture:—We shall take up the agricultural industry first. The problem of capital must here be studied from the points of view of: (1) the substantial landowner who manages his estate himself; (2) the tenant farmer who takes land on lease; and (3) the small peasant proprietor. Capital is needed in agriculture for a three-fold purpose: (1) acquisition of land, (2) land improvement and (3) cultivation of land. Capital and credit are required in the first instance for the purchase of land in the market or for buying off a cosharer in family property. Return to such capital is seldom obtained from the product of agriculture at the normal rate, except in specially favourable circumstances. Ancestral or old debts constitute a burden of this character which landowners have to carry. Inherited landed property, on the other hand, places a man in a favourable position. Capital of the second order increases the productivity of land and can be redeemed in the course of years; and the third kind of capital is the ordinary working capital that is paid off when crops are harvested. This three-fold distinction has an important bearing upon indebtedness, credit and banking connected with agriculture.[1] The question of agricultural capital must, therefore, be considered in relation to (1) the redemption of old, heavy debts; (2) the needs of more or less permanent improvements; and (3) the supply of work-

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1 An interesting discussion of these credit problems is found in German economic literature e. g. Philippovich: *Grundriss der Politischen Okonomie*, Band II.

ing capital. The zamindars, the old aristocracy and the landed gentry, belong to the first class and they command a good deal of capital consisting of farm houses and wells, ploughs and cattle and of seed and manure. Though often in debt, they are in a position to practise intensive cultivation by ensuring a steady and adequate supply of water, by constructing embankments to retain moisture and silt, by deep ploughing and by putting rich and productive manures into the soil. Many of the zamindars have hereditary or statutory tenants on some or most of their lands and have to leave the cultivation to them, and in that case the industry suffers from the lack of adequate capital. The second class consists of such tenants or others to whom the zamindars lease out their lands because they do not want to take the trouble of carrying on cultivation themselves. As far as their means are concerned, the small peasant proprietors who constitute the third class, fall into the same category as the tenants of the landlords. Some of them may, of course, be well off, but the capital that is available to the majority of them, is of the simplest kind and is scanty. The rayat has a wooden plough and a few crude implements, a pair of bullocks and a cart which he can ply for hire in the off season. As a rule, he is indebted to the village money-lender, and his dependence on the sowkar is notorious in many parts of the country. The rayat has to borrow at exorbitant rates of interest and is crushed under the weight of his debt. His land is generally mortgaged and even his crops are not free.

Instances of solvent rayats are very rare and are to be found in tracts which are favoured with irrigational facilities and which grow commercial crops. But even here, the landholder has to raise capital needed for permanent improvements and working expenses, the former being, as a rule, borrowed on the security of land. The Royal Commission on Agriculture found that inquiries made in the Punjab suggested that "the total sum secured on usufructuary mortgage of agricultural land in that Province was Rs. 35 crores, which works out at an average of rather less than Rs. 12 for each cultivated acre." Conditions in other Provinces are more or less similar. It is not, however, the debt as such or even its amount that is to be deprecated, as farming requires credit on a large scale even in European countries. The fact to be deplored is that 'mortgage credit is rarely used to finance improvements in agricul-

tural land.[1] The question of the indebtedness of the cultivators has engaged the attention of the Government and the public for over sixty years, and the frequent recurrence of famines made it, for decades, a live issue. Ameliorating measures have been taken from time to time and provision has been made for Government loans for land improvements. Co-operation, credit and banking will form the subjects of later chapters, and it will suffice here to observe that supply of capital to the cultivating classes is the principal object of that movement which has, however, yet touched barely 4 per cent. of the population of actual cultivators in the country. An idea of the smallness of the equipment of the rayat's industry will be obtained from the fact that the amount lent to a member of co-operative societies does not, on the average, much exceed 75 rupees. Fifty years ago, the Deccan Riots Commission observed with reference to the indebtedness of the landholding classes that the estate of an ordinary kunbi rayat, exclusive of his land and its product, had been estimated by competent authority to be of little more than Rs. 200 in selling value and that it would be somewhat as follows :—Live stock=Rs. 125, Implements and utensils=Rs. 20, House=Rs. 50, Miscellaneous=Rs. 33; Total Rs. 228. Some rayats do not possess even this equipment and have to borrow bullocks and ploughs for the sowing season. The indebtedness is often a legacy left by the forefathers of the cultivator and he is heavily handicapped thereby. There is practically little surplus left after the expenses of the maintenance of his family are deducted from the gross produce, and it is with the greatest difficulty that he can meet the interest charge and the Government assessment. The Famine Commission of 1880 found from evidence collected from all parts of India that about one-third of the land-owning class were deeply and inextricably in debt, though not beyond the power of recovering themselves. An analysis of the embarrassment of twelve villages by the Deccan Riots Commission revealed the fact that about one third of the 'occupants of Government land' were embarrassed with debt, that

1 "The existence of a havy burden of debt of this character exercises a most detrimental influence on agricultural progress. This is due not only to the fact that an important source of credit is drained for unproductive purposes and that the potential credit available for improvements is correspondingly curtailed but also because it is found that in the case of usufructuary mortgages, the mortgagor too often declines to the position of a permanent tenant under the mortgagee, paying, not a fair rent but the utmost the lender can extract or extort."—*Royal Commission on Agriculture in India*, para 352.

their debt averaged about eighteen times their assessments and that nearly two-third of the debt was secured by mortgage of land.[1] No appreciable change for the better has taken place in this connection during the past generation. High prices of agricultural produce and the spread of the co-operative movement are indeed factors which have led to some improvement but their influence on the mass of the agricultural population has not yet become noticeable enough though it is felt in certain individual cases. The cultivation of every crop needs finance from one source or another, and commercial crops like cotton, sugar cane and seeds require it on a large scale. Both owners of land and tenants have, therefore, to borrow and the rates of interest depend upon the standing and credit of the borrower, as the amounts depend on the kinds of crop raised. The inquiries made by the Indian Central Cotton Committee with regard to the finance and the marketing of cultivators' cotton in different tracts of the country have yielded interesting results and the attention of the curious reader is specially to be drawn to them. The loans vary from Rs. 200 to Rs. 600 per cultivator and the interest rates from 9 to 25 per cent. on the average.

63. Use of Agricultural Capital :—Improvements of a more or less permanent nature require large amounts of capital and long-term credit and are therefore undertaken by a very few landlords. Less costly improvements are within the reach of many, and working capital is needed by all. Those rayats who have their own capital to work with are, of course, in a favourable position. But, as pointed out already, borrowing capital, either for permanent improvements or for the ordinary operations of cultivation, is itself, not an evil; even big industrialists have to resort to it. It is the exorbitant terms on which the cultivator has to borrow and which render his work uneconomic that make his position hopeless. This remark applies particularly to cases in which the millstone of old debts adds its crushing weight to the burden of seasonal borrowings. Agricultural capital takes the form of cattle, seed, manures, water supply and implements as also the subsistence of the

1 Very interesting results in this connection have been arrived at by Dr. H. H. Mann in the inquiry he has made into the economics of two different Deccan villages ('Land and Labour in a Deccan Village'). See also 'Some South Indian Villages,' in which facts and figures relating to rural economics in the Madras Presidency have been given. Similar information regarding the rural population in Bengal and the Punjab may be gained from 'The Economic Life of a Bengal District,' by J. C. Jack and 'The Punjab Peasant in Prosperity and Debt,' by M. L. Darling, respectively.

farmer and his labourers whenever they are employed. The importance of pure, selected seed to good farming can not be exaggerated. The ordinary cultivator has not the means and the facilities to secure good seed, and therefore, the quality of the crops raised by him, is indifferent. The wise rayat will, of course, reserve a small part of his crops for this purpose but in many instances this is not done or is not possible. The Agricultural Departments are now placing good seed at the disposal of cultivators. In the matter of manure there is a great deal of waste going on at present. Farm-yard manure and cowdung are not properly utilized and improved manures are not within the means of the common rayat. The attention of the Agricultural Departments has been drawn to this question also and efforts are being made to improve the existing state of things. The exports of oil seeds and cake and other fertilizing materials deplete the manure resources which would otherwise be available, and the exercise of some control in this behalf is called for. This is an illustration of the way in which the modern system of international exchange prejudicially affects the condition of producers in India. As to water supply, the seasonableness and adequacy of which are indispensable for the success of crops, rainfall is precarious and insufficient over large tracts of the country, and the agricultural industry is often at the mercy of nature. Lands irrigated by canals and wells are in a fortunate position, and in them the condition of agriculture is comparatively satisfactory. Sinking of wells is within the means of only a few cultivators and dry farming alone is possible over large areas. But even in the latter case improved methods, e. g. conservation of moisture, are being attempted.

Rain water is nature's free gift to agriculture, and in the drier zones of the country, the cultivator can only make the most of what she distributes. Labour and capital are, however, expended for utilizing the natural stores of water by means of channels, tanks and wells. The quantity of moisture and the times when it is needed, vary from crop to crop and from one part of the country to another. Crops like rice require large supplies and they are normally provided by rains which are plentiful in tracts where the crops are grown. Other crops thrive on small doses administered at proper times. Whenever practicable and particularly in villages which are advantageously situated near natural sources of water, e. g. rivers, streams &c., landlords have, from time immemorial, put forth corporate and cooperative effort to construct simple works of irrigation. But

unfortunately many of them have fallen into disuse and have silted up and dried. State and communal enterprise is essential to revive and reconstruct these works, and only recently has the attention of government, e. g. in Bombay, been practically drawn to this question. The total area sown with crops in British India may be roughly taken at 250 million acres and the total irrigated area at about 50 million acres. Of this, 40 per cent. or 2 million acres are irrigated from Government canals, 3 million acres from private canals, 7 millions from tanks, 12 millions from wells and about 6 million acres from other sources of irrigation. Irrigation on an extensive scale is obviously essential in tracts where the rainfall is most precarious. In Lower Burma, Assam, Eastern Bengal and on the Malabar Coast (including the Konkan), where the rainfall is ordinarily heavy, the crops hardly need the help of irrigation unless there is unusual scarcity of rain.

The highest percentage share in the total irrigated area, 28 per cent., is taken by the Punjab ; and the United Provinces, Madras, Bihar and Orissa, follow with 21, 20, and 11 per cent. respectively. There are extensive tracts e. g. the Deccan, where rain is precarious and yet irrigation facilities are wanting. That is the reason why the proportion of irrigated to total cropped area in the Bombay Presidency excluding Sind is so low. Of the 50 million acres under irrigation, nearly 18 millions are claimed by rice, 9¾ millions by wheat and 1½ million each by jowar, bajra, sugar cane and cotton. The following table shows the proportion of irrigated to total cropped area in the various Provinces :-

Proportion of Irrigated to Total gross Cropped Area

Province	Gross area sown Acres (in 000's)	Gross area of crops irrigated (from government and private sources) Acres (in 000's)	Percentage of area irrigated to area sown
Assam	... 6,379	364	... 5·7
Bengal	... 27,777	1,710	... 6.2
Bihar and Orissa	... 32,031	5,386	... 17·4
Bombay Proper	... 47,764	1,092	... 3·9
,, Sind	... 4,451	3,281	... 73 7
Burma	... 17,172	1,436	... 8.4
C. P. and Berar	... 25,728	1,110	... 29·7
Madras	... 37,691	11,206	... 4.2
N. W. F. Pr.	... 2,673	919	... 34·4
Punjab	... 30,670	13,644	... 44·1
United Pr.	... 43,739	9,620	... 21·0
Minor Administrations	807	156	... 19.3

64. The Role of the State:—In this connection, it is pertinent to state the principle that in a backward community of petty peasants and tenants it is not safe to expect private interest and enterprise to conceive and carry out projects of economic utility, calculated to promote the development of agriculture and other industries. The State has to step in to perform duties which may elsewhere be left to private, individual or corporate effort. An enquiry by a Royal Commission as to what the State ought to do to promte agricultural improvement in India and its insistence on certain policies being adopted by Government, demonstrates the much-needed awakening in the country in this respect. The above mentioned principle must find a wide application in this country and must be extended to all branches of economic activity in which private, individual enterprise is alone not equal to the efficiency and the organization demanded by national interest. In agriculture (and this is equally true of cottage industries), for instance, demonstrations, education and experimentation with respect to new and improved processes and implements, the supply of pure seed and good manures, expert advice as regards the sinking of wells and draining and levelling of land &c, are very essential. In the West and in this country also large works of water supply and public sanitation are undertaken by national and local authorities; and there is now a growing tendency everywhere for the latter to intervene in economic affairs where such interference is necessitated by larger public interests. It has been the old practice of rulers and local bodies in India to construct and maintain works of water storage, canals and tanks, intended for the irrigation of agricultural lands. The State in India started the construction of railways through British companies and by its own agency three quarters of a century ago with a view to provide easy and rapid means of communication aud transport of goods; but it was only the constant recurrence of the failure of crops that drove it to consider the necessity of the extension of irrigation works. It was not before the beginning of the present century that the whole question was systematically discussed and the Irrigation Commission recommended a comprehensive scheme for the construction of storage works and canals with public funds. The principle that Government is the proper body to initiate, finance and maintain large irrigation works for the encouragement and support of agriculture

is definitely accepted and a policy in conformity with it is being vigorously prosecuted.[1]

The great possibilities of irrigation projects carried out by the State in bringing culturable waste lands under the plough, making a seasonable distribution of the water which nature plentifully pours through the country's rivers and in ensuring an unfailing production of different crops, may be illustrated by the results achieved in the Punjab, the United Provinces, Madras and Bombay. The latest instances of the Sutlej Valley Project, the Sarda Canal and the Sukkur Barrage and Canals Project are of no little interest in this connection. The first of these is estimated to cost nearly 24 crores of rupees and will irrigate 5 million acres, of which 2 million will be perennial and 3 million nonperennial irrigation. The cost of the second is estimated at 10 crores and it will irrigate $1\frac{1}{3}$ million acres. The Sukkur Barrage is going to be the greatest work of its kind in the world, and the whole scheme is expected to cost more than 20 crores. It is stated that the project will eventually supply irrigation for nearly 6 million acres and help the production of rice, cotton, wheat, oil-seeds and jawar. It may be imagined what this means to the people of Sind who have to depend at present on inundation canals from the Indus and have little rain to give moisture to the land, and to India, as a whole. Government alone could shoulder the heavy responsibility of borrowing the huge sums of money involved in projects like the above and could afford to wait for years for the results of the enterprises. The gain to the farmer, big and small, in being able to utilize capital in the shape of irrigation facilities at a reasonable cost, charged by the State, is undoubted. The Cauvery Reservior project and the Mettur dam in Madras, estimated to cost above Rs. 7 crores and the Bhandardara and the Bhatgar works in the Deccan, which are also stupendous undertakings, in their own way, may also be mentioned, and they utilise, through large lakes the waters of the Nira and the Pravara rivers.

65. The Cattle Problem :—Among a predominantly agricultural people like those of India, as is to be expected, cattle form a valuable possession and constitute an important part of the capital of the cultivator. Rearing of cattle was, in ancient times, enjoined as one of the primary duties of the Vaishya caste, and the cow was a

1 Compare Philippovich: *Grundriss*, II.

necessary domestic animal with the householder. The religious idea that all animal life is sacred is deep-rooted in the public mind; and the doctrine of 'ahimsa' has combined with economic necessity to produce a strong and widespread feeling in favour of the preservation of cattle and especially of the cow. The number and the quality of live stock must influence the condition of the agricultural industry in all countries and especially in India where power-driven machinery is hardly used in farming and in industries dependent on it. Large breeding farms maintained for contributing to the food supply of the country are, of course, not possible in India in view of the strong religious sentiment of the bulk of the population. Dairying is carried on as an industry by hereditary milkmen and people of other castes who have taken to it as a business. Scarcity and famine reduce the fodder supply which is not organized and take a heavy toll of cattle life from time to time. The economic and the social effects of this diminution are serious as bovine animals are an indispensable part of the equipment of the cultivator. They are required for the plough, the cart and the water-lift; and they provide a rich source of the supply of milk, fuel, and farm yard manure. The condition of Indian cattle, taken as a whole, is admittedly unsatisfactory and various causes have contributed to this result. In this, as in so many other matters, the old system has decayed and a new one has not taken its place. The total number of livestock of the bovine class, which is cattle proper and comprises oxen and buffaloes, is about 151 million. The average number of cattle and buffaloes for British India as a whole is 67 per 100 acres of sown area and 60 per 100 of the population. Statistics regarding the numbers of cattle can hardly be accurate though they are based on a census taken annually in some provinces and quinquennially in others. The figures which are available and are given here, are, however, useful in conveying a rough idea of the position. The following statement gives detailed figures:—

	No. of cattle Per 100 acres of sown area	Per 100 of population		No. of cattle Per 100 acres of sown area	Per 100 of population
Bengal ...	108	54	**C. P. and Berar**	47	83
Madras ...	66	52	**Assam**	97	76
Bombay Proper...	31	53	**N. W. F. P.**	47	48
Sind ...	53	71	**Ajmer**	113	68
U. P. ...	88	68	**Delhi**	62	28
Bihar and Orissa.	82	61	**Coorg**	104	83
Punjab ...	56	73	**Manpur**	86	120
Burma ...	37	47			

It is calculated that one pair of bullocks is required to plough five acres of land, and it is believed that consequently the number of draught cattle is inadequate to the demand. On the other hand, it is pointed out that the number of cattle has been steadily increasing and that the proportion to the cultivable area is quite satisfactory. The position in Bombay, in any case, appears to be far from gratifying. The Agricultural Commission furnishes the following relevant figures concerning the relation of the number of bullocks to the area sown :—

Province	Per 100 acres of net area sown		Average	
	Bullocks	Cultivators (male workers)	Area cultivated per yoke	Area of holding
	No.	No.	Acres	Acres
Bombay	10	8·1	20·0	12·4
Burma	11	11·5	17·9	8·7
C. P. and Berar	15	7·6	13·3	13·2
Madras	15	17·3	13·0	5·8
Punjab	16	11·2	12·9	9·0
Bihar and Orissa	27	26·5	7·4	3·7
Assam	27	27·5	7.3	3·6
U. P.	29	29·1	6·9	3·4
Bengal	36	35·2	5·6	2·8

It is argued from the purely economic point of view that it is not the number but the quality of cattle that matters, both for purposes of milk and agricultural operations, and that, therefore, it is a wasteful procedure to try to preserve all cattle indifferently, irrespectively of their quality. The dearness and the insufficient supply of fodder again, it is contended, will not allow the feeding of useless along with useful cattle, and this difficulty must set limits to the number of animals that may be maintained. Government's forest policy, which has to consider public claims regarding (1) fuel, (2) fodder supply, (3) extension of cultivation and (4) grazing areas, has an important bearing on this question.[1] The Agricultural Commission dealing with the number of cattle and the fodder available, gives the following figures : "For British India as a whole, we estimate that for each 100 acres of net area sown there are 92 acres of uncultivated land available for grazing, to which should be added 21 acres of fallow and that on

1 See Appendix V to the Report of the Agricultural Commission.

this total area of 213 acres there are supported 20 bullocks, 17 cows, 16 other cattle, 3 male buffaloes, 6 she-buffaloes and 5 young buffaloes, a total of 67 cattle, in addition to 27 sheep and goats and some other stock." The extension of railway and motor transport is also a consideration which has to be taken into account in this connection. Mere existence of uncultivated or waste land has, however, no significance as distance is one of the factors which have a restrictive effect in the matter. The demand that the slaughter of cows should be prohibited by law, it is declared, is unsound and impossible, on economic as well as other grounds. There can be no doubt that religious feeling against the slaughter of animals, and particularly of cows, has a great deal to do with the agitation for the prohibition of cow-killing. It is equally true that from the merely business point of view, it is desirable rather to have a small number of well-bred and well-fed cattle than a large number of starving and useless animals. But the strong religious sentiment which prevails in the country can not be ignored, and steps must be taken at least to prohibit indiscriminate slaughter that goes on and to improve the breed of cattle.

Bullocks and cows find their way to the slaughter houses because there is the demand of a certain section of the population which is not altogether negligible and because the owners of the animals can not afford to keep them and must sell them for whatever price they will fetch. The fodder problem is becoming more and more difficult every day and that of milk supply is already serious. The cow protection movement has been in existence for years but has had no appreciable effect upon the difficult problem. And the reason is obvious. Philanthropy may stimulate but can not replace the spring of economic action. The difficulty of maintaining cattle in the absence of cheap and convenient pasturage, the rural population finds impossible to get over. The attention of the provincial agricultural departments has been drawn to this question and new fodder crops are recommended; breeding farms are also being maintained for the benefit of the public and fodder stores are being organized. Cattle fairs are held with a view to encourage the breeding of animals of quality and veterinary work is being actively carried on for the prevention and cure of cattle diseases. The establishment of well-organised dairies is likewise a measure intended to promote the development of the agricultural industry. Substantial landlords and agricultural associations must co-operate with Government in solving

this problem, and individual initiative and example will go a long way to help in the solution. Economic considerations and religious sentiment appear to conflict in this instance, but the former by themselves are weighty enough to call for serious thought and prompt action. There are a number of famous breeds of bullocks and buffaloes and they must be preserved and extended. Cow protection societies all over the country, are doing good public work, which, however, touches only the fringe of the problem.

The Royal Commission on Agriculture has discussed the question of animal husbandry, particularly from the point of view of the agricultural industry, with commendable thoroughness and practical sympathy. The more important of its findings may, therefore, be usefully noted here: In no country in the world are cattle of more importance than they are in India. Milk, though important, is a secondary consideration. The primary function of the cattle is as draught animals for the plough or the cart. Compared with other countries, India has more cattle than necessary and it is possible to reduce the number of working bullocks without reducing the standard of cultivation. If cattle were more efficient, a smaller number would suffice. There is a vicious circle here in which the cultivator moves. The number of cattle is governed by the demand for bullocks, and the worse the conditions of rearing them the larger is the number of those kept. Cows become less fertile and calves undersized and as these are found to be unsatisfactory, cultivators breed more and more cattle to secure useful bullocks. Cows deteriorate more and more as pressure on the food supply of cattle increases and with the multiplication of poor cattle, breeding of good animals is rendered more and more difficult. Four cardinal points in a policy of improvement must be (a) reduction in the number of plough cattle; (b) increase in their efficiency; (c) efforts to decrease the number of bullocks required for cultivation and (d) effort to secure better treatment for dry cows and cows in calf. Feeding and breeding are two important factors, the first governing the effectiveness of the second. The cow is the most mismanaged of domestic animals. The cost of maintaining a pair of bullocks lies between Rs. 125 and 175 a year and it works out at Rs. 12 to Rs. 17 per acre of cropped area. This cost of bullock labour is obviously very heavy. The available and accessible area of grazing land being limited, it ought to be more economically managed.

66. Improved Implements:—Well-irrigation means a considerable outlay of capital to which only a few cultivators are equal; and unless there is an assured supply of water, there is no certainty of a crop being obtained and rich manures can not be employed. Dry farming is much too common in this country, the nature and the size of the crops depending entirely upon the character of the monsoon. It is believed that there are in existence in India at least 30 lakhs of wells from which water is lifted for irrigation and their total value may be roughly put down at 100 crores of rupees. They are of varied degrees of capacity; and the devices for lifting water from them range from the crudest contrivances to the most up-to-date mechanism. If power-driven pumps could be used in connection with even a fraction of the larger wells out of this number, the advantage would be considerable. It will, of course, be uneconomic to use machinery in agriculture unless the area cultivated is sufficiently large and the crops grown can be profitably marketed. These conditions are present only in the case of a few crops and a few landowners. The principle that mere possibilities of technical improvement are of no practical significance when they do not harmonise with the economic interest of those who are expected to avail themselves of them, should be borne in mind here.[1] Requirements of national economic development can similarly be satisfied only to the extent to which the individuals concerned feel and can be made to feel interested in them. Enthusiasm for agricultural reform must, therefore, be tempered with a correct appreciation of the actual position of the cultivating classes in India, a consideration to which sufficient weight does not appear to have been given in the earlier efforts at improvement. The conclusions of the Agricultural Commission on this point are interesting: "Agricultural implements in India are, on the whole, well adapted to local conditions. They are within the capacity of the draught oxen, comparatively inexpensive, light and portable, easily made and, what is perhaps of even greater importance, easily repaired and they are constructed of materials which can be readily obtained. In spite of these advantages there is undoubtedly very great scope for improvement in the light of modern knowledge of soil conditions."[2] The question of inducing the Indian agriculturist to make use of improved implements and machinery is surround-

1 **B. Wilbrandt:** ***Einfuhrung in die Volkswirtschaftslehre.***

2 **Report, Para 105.**

ed with difficulty.[1] Ignorance and the lack of resources and facilities stand in the way; still it is admitted that if the quantity and quality of agricultural produce is to be improved and the efficiency of labour is to be enhanced, implements and hand-driven machinery of an improved pattern must be largely used. It is, therefore, encouraging to find that iron ploughs, cane-crushers and water-lifts are coming more commonly into use in a number of localities.

It is well-known that agriculture does not provide much scope for the use of machinery. Yet it is slowly coming into use on the bigger farms and its economic possibilities have been already demonstrated by practical experience in industries connected with agriculture. Ginning and pressing cotton, the crushing of sugarcane, the husking of rice, pressing of oil from seeds, manipulating operations in connection with groundnut, &c. as well as the lifting of water from wells and rivers—these profitably lend themselves to the use of machinery and motive power. This development has given rise to a new industry and iron water-lifts and crushers are being turned out in small factories in various parts of the country. The increasing demand for cotton, sugar, oil seeds and the high prices which these command in external markets, have encouraged the use of machinery in the industries connected with these raw materials. It was thus pointed out in the report on the census of 1911 that there was in the Madras Presidency a growing tendency to supercede hand labour by machinery driven by power derived from steam or internal combustion engines and that small factories had been established for various purposes mentioned above. The latest census report illustrates the rapid growth of this tendency by showing the remarkable increase

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1 "Much success has, undoubtedly, been obtained in the introduction of grain winnowers, cane-crushing machinery &c. But in recommending the introduction of reaping machines or heavy English ploughs caution is necessary. Reaping machines may be useful on large estates where labour is scarce, but the whole rural economy of a tract where population is dense may be upset by their use. A large amount of cheap labour which ordinarily does the reaping is thrown out of employment and the gleaners lose their recognized perquisites. In the case of heavy ploughs, the advisability of deep ploughing has first to be proved. In both cases the capacity of the available cattle and the difficulty of replacing broken spare parts and of carrying out repairs are serious obstacles to the introduction of foreign machinery. As in the case of plants, the improvement of the local material which the cultivator can himself make and repair and which his cattle can draw seems the more hopeful line of improvement."—"Agriculture in India" by Mr. James Mackenna.

which has taken place in the number of rice mills using power in some of the districts of the southern Presidency. It is necessary to bear in mind here, however, that though the rice mills, cotton gins and presses, oil and flour mills and sugar factories are closely allied to the agricultural industry, the capital and the enterprise are seldom those of the purely cultivating classes. These industrial establishments must, therefore, be distinguished from agriculture proper and separately considered. In towns and cities, mechanical power is being employed for pressing oil, making flour and for similar other purposes. Flour mills are becoming very popular with the mass of people in towns, and gins have almost entirely superceded the domestic industry in which women were engaged.

67. Small Industries :—Village industries belonging to the old social order are in the same state as agriculture in respect of the sources and investment of capital. The amount needed by the craftsman and the artisan is small, their tools and machines being simple and the raw materials required, inexpensive. As a rule, however, they are not able to provide these from their own resources and have to borrow capital from the money-lender for the purpose. Indebtedness is a curse which blights almost all classes of workers, agricultural and non-agricultural, and reduces their industrial activities to the state of unprofitable drudgery. The sowkar advances the running capital, often in the shape of raw materials and necessaries of life, and takes the product of the craftsman's labour in lieu of interest and repayment of capital. The prices charged and given for these are, as a rule, unfavourable to the producer. Persons who can dispense with the assistance of the money-lender are independent and well off, providing capital out of their own savings. In Assam and Burma, where spinning and hand weaving is still a widely spread domestic industry, the *charkha*, the loom and its connected appliances are the common possessions of families of persons who follow other avocations. From the point of view of capital and labour, spinning is most inexpensive and convenient and is extensively practised in villages which have not yet been invaded by mill-made yarn. The number of looms with the fly shuttle is steadily increasing and efforts have been made to provide an improved type of loom whose capital and running cost will not be beyond the means of the common craftsman. The handloom weaving industry is carried on successfully and on a large scale on these lines in certain centres e. g. Surat.

The capital invested in industries other than the simple handicrafts is mostly supplied by persons belonging to the middle and the lower middle class who rely on their own means or have credit enough to borrow on comparatively easy terms. The cost of machinery and ra v materials is not high. Only a few skilled workmen are employed and are supervised by the proprictor, and power may or may not be used. A long list may be made of such middle-size industries, and a few names will suffice for the purpose of illustration. Thus aluminium factories, iron and brass foundries, hardware and cutlery works, flour mills, bakeries, rice mills, dairies, gul and sugar factories, tobacco factories, soap works, printing presses, book-binding works, hosiery factories, silk mills, gins and presses, tile and brick factories, lime works, rope works, brush works, works for the manufacture of brass and silver vessels, bangles, toys, inks &c. and button factories will constitute a sufficiently miscellaneous list. Most of these may be described as urban industries because they have grown in and about small and large towns and derive their initiative and finance from town-people. It should be noted how there is a growing tendency to substitute hand labour by machinery driven by power wherever possible, and the horse conveyance and the bullock cart are making room for bicycles and motor transport. How the small industries can be improved if capital is made available to the artisans on easy terms is demonstrated by the way in which the sewing machine has come into extensive use and displaced manual labour in the tailoring trade during the last generation. Co-operative organization alone is calculated to enable the poor rayats and rural craftsmen to tackle the question of industrial capital in many of the directions indicated in this chapter, and the education of the people by means of propaganda and demonstration is the only effective method of securing progress.[1] It is impossible to form a correct estimate of the amount of the capital employed in the different industries of the types dealt with above, and to say what actual increase there has been in its quantity within recent years. There is no doubt about the fact that capital is being invested on a growing scale in new industries which are rising on all sides, and the people are coming more and more to appreciate the advantage of lending their savings to industrial and commercial concerns. The very gradual

1 Interesting information on this subject will be found in the annual Reports of the Departments of Agriculture, Industries and of Co-operative Societies in the different Provinces.

spread of Swadeshi and the failure of numerous banking, manufacturing and commercial concerns which occurred a few years ago, were eloquent enough in this respect as they showed the weakness and the strength of modern Indian industrialism. And the industrial boom which broke out on the termination of the world war and on the removal of State restriction of the investment of capital, clearly proved the enormous profits some people had made during war time, the accumulated savings of a few, which found fresh outlets and the opportunities that were opened for the establishment of new industries.

68. Large-scale Manufactures:—If the small improvements which are being effected here and there are omitted, it will be safe to state that there is no appreciable increase in the amount of capital invested by the people in the agricultural industry and in the small handicrafts. It is only in the manufacturing industries that a remarkable development has taken place in this respect. Excepting the cotton industry of Bombay, however, and other industries of extremely moderate dimensions elsewhere, they have owed their rise and prosperity mainly to European initiative and capital. Indian enterprise is slowly but steadily making its way in industrial organization and expansion and it has been strikingly stimulated by war-time prosperity. It is profits brought in by trade, especially foreign trade, and speculation that have been the main feeders of capital sunk in industrial enterprises of the modern type. Industrial and trade profits gather volume in the hands of individuals and stimulate big capital enterprises. In the hands of certain wealthy classes, however, the gains of speculation and trading are not helpful to industries which bring only a small though steady income to them and they do not like to hazard their money in manufactures which they have not acquired the capacity to manage and control. This state of things too is slowly changing and Marwari merchants in Calcutta and elsewhere are entering the province of modern large-scale industry as financiers.

Almost the whole capital of the cotton mills, amounting to about thirty five to forty crores of rupees, has been raised in India. The tea plantations which have nearly the same amount of capital invested in them, are most of them joint stock concerns registered in the United Kingdom. The jute industry with a capitalisation in the neighbourhood of twenty five crores, is also financed by European enterprise. That is very largely the case with the coal industry

which has an aggregate capital of fifteen crores of rupees. Mineral industries like those connected with gold, petroleum &c. are based on imported capital. Big engineering works and insurance and banking companies have to rely on external capital like the railways; and the Indian government's commercial undertakings have received the bulk of their capital from borrowings in the British market. Industries connected with wool, leather, silk, sugar, paper, glass, tiles, cement, oil, soap &c. have recently absorbed considerable capital, a large part of which, particularly in Bombay, is Indian, and there is much scope for expansion in this field. Several woollen mills, tile factories, tanneries, sugar factories and oil mills have been thus floated entirely with indigenous capital. The large quantities of capital which are required for manufacturing, planting, metal and mining industries have not been available in India and they have not been forthcoming because, so far as the people of this country are concerned, the enterprise, the confidence, the accumulated savings, expert knowledge and the organizing capacity as well as the facilities which are necessary for the establishment of such concerns, are practically absent.

The post-war industrial boom and the depression which succeeded it, are exceedingly instructive in this connection. There were in the whole of India about 2,500 registered joint stock companies in 1912-13 and their total paid-up capital amounted to 72 crores of rupees. At the close of the war period in 1918-19, the corresponding figures were approximately 2,800 and 107 crores. War-time restrictions on the floating of new capital being removed, the year 1921-22 witnessed a rapid growth, reflected in the figures 5,190 and 230 crores of rupees for the number of joint stock companies and paid-up capital respectively. Then came on the slump and several concerns failed and went into liquidation. While 948 companies with an aggregate authorized capital of 281 crores were floated in 1919-20 and 1039 companies with 148 crores in the next year, the figures representing authorized capital in the three succeeding years declined to 80,34 and 26 crores respectively. The amounts of the aggregate authorized capital for the three years ending in 1926-27, were 21, 30 and 19 crores respectively. Owing to general economic depression, there was not much improvement, in the next two years, the figures respectively for 1927-28 and 1928-29 being Rs. 15·8 and 27·26 crores. Capital raised on deben-

tures is, of course, in addition to this ordinary capital; and working capital is obtained to supplement it by means of deposits or of loans from banks.

69. Existing Facilities:—A remarkable example is provided by the Tata Iron and Steel Company which was floated in 1907, with exclusively Indian capital of more than 2½ crores of rupees. The undertaking was steadily expanded and no difficulty was experienced in securing the additional capital,[1] required later, the whole aggregating 10½ crores of rupees, besides debentures. The fact, however, that the company found it necessary to float a big debenture loan in England and in times of depression found it difficult to raise sufficient funds to cover the working expenses, is significant. It is superfluous to state that India's financial capacity is restricted in comparison with that of leading nations in the West, but it is an undoubted fact that within moderate limits there is considerable latent capital in the country which may enable enterprising people to start new industries provided they can inspire confidence. The history of manufacturing, commercial and banking concerns which have been floated in recent years, proves that the sources of Indian capital have not been properly tapped and that they are calculated to yield a much richer harvest. Sound concerns, under the management of experienced and well-known industrialists, rarely fail to attract the requisite capital, most of which comes from the business community and a small proportion from the professional classes. Capital goes on increasing in size like a snow ball, in the hands of big capitalists and industrialists, and a good industrial proposition does not fail to enlist their support. English investors were approached by Government and they have contributed largely to the national debt of India. But the branch and feeder railways are now being financed with Indian capital and most of Government's annual borrowing is being done in India with remarkable success.

The position of rural areas with respect to the creation and accessibility of industrial capital differs radically from that of large commercial centres. There is, however, no small amount of capital available in the mofussil and a part of the annual savings is put to

1 "For instance, at a recent directors' meeting of the largest industrial group in the country, it was decided to increase the capital by issuing nearly 5,000,000 worth of preference shares. In a few minutes this sum had been promised by directors sitting round the table and was subsequently entirely subscribed privately by Parsee and Indian investors."—*Ainscough's Trade Report, 1921.*

an industrial use. But owing to the absence of the regular habit of thrift, to lack of banking facilities and the infancy of the co-operative movement, the small savings of the rural population can not be collected and made serviceable for the expansion of industries ; nor can the cultivator or the artisan draw upon a bank to satisfy his capital needs. The village money lender accommodates the small farmer and craftsman and exacts a comparatively high price for his services. It is only larger concerns and big industrialists that can secure help from the banks, which can not deal with the rayat or the artisan. Large and small banks must, therefore, be multiplied throughout the country and business habits must be inculcated among the mass of the people. The peasant and the craftsman are absolutely poor and thriftless. They either can not or do not save, and with their dependence on the middlemen or the sowkars, have to carry on their industries in most unfavourable conditions.

The difficulties about capital are not so serious in the cities and presidency towns. In the Bombay Presidency, in particular, it is stated, the position is very favourable. This is, however, the case of people who have substantial friends and good business connections, and the small men are as badly off in cities and towns as in the mofussil. In the country as a whole, the banking system is too inelastic and insufficient to meet the requirements of the people. The small industrial organizer or trader is hampered by the lack of capital and has no access to the sources from which it may be obtained. He can not get into touch with a bank which may help him and the expansion of banking and Government assistance appear to be the remedies that must be applied to improve the existing state of things. The spirit of commercial and industrial enterprise is slowly spreading to the smaller towns and the rural areas, and it is becoming more and more possible to obtain financial help from the trading community and the thrifty classes for new ventures of moderate size. The report of the Indian Industrial Commission has laid special stress upon this aspect of the capital problem and indicated the directions in which reform is called for.[1]

1 "In the case of small industries and of those that are new to India, witnesses complained bitterly that the public are unwilling to invest, that sufficient capital can not be obtained from the friends and acquaintances of the promoters, and that banks are unwilling to supplement the deficiency or even to provide working capital. Money for such purposes can only be obtained at a rate so high as to swallow up the profits of the venture."—Report of the Indian Industrial Commission, page 114.

70. The 'Hoarding' Habit :—Much has been made of the hoarded wealth of India, and exaggerated views are held about its size. It has been estimated at anything between 500 and 800 crores of rupees. By hoarding is, of course, meant the habit of allowing wealth to lie idle and of making an unremunerative use of what might have been employed in the further production of wealth. Some wealth of this description in India may certainly be converted into capital, and the spread of education, the growth of the investing habit and the provision of banking facilities may be calculated to bring about this change. On the whole, the people of this country are thrifty, and certain classes habitually practise thrift and do lending business. Poverty and conventional social needs drive many a poor person into the arms of the money-lender, and once a borrower always a borrower, becomes the rule in such cases. The above figures appear to exaggerate the size of the hoards, but even taking the highest estimate of the so-called hoarded wealth of India, we find that its amount does not exceed Rs. 25 per head of the population, that is about half a year's average per capita income. The same criticism is offered with respect to the largeness of the size of the annual imports of gold and silver into India and the fact is repeatedly bewailed by successive Finance Members.[1] And the explanation is the same in both cases. A large part of the total is obviously used for the jewellery and plate of the princes, the aristocracy, the landed gentry and the professional classes; and the share for which the bulk of the population is responsible, must be too small to be at all worth consideration. Apart from the fact that every pie of the hoarded wealth is urgently required for use as capital in the country, the total amount is as nothing compared with the hoards of other countries. Fondness for ornament, pomp and show is inherent in human nature, and Indians are not perhaps free from the common weakness. The average Indian consumption of the precious metals is, however, small. The use of the precious metals in the arts in a

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1 This subject will be dealt with further in the Chapter on currency. Writing to the Indian Merchants' Chamber, Bombay, on 16th July, 1929, the Finance Member says :—"The private imports of gold and silver for the ten years upto March 31, 1929 have amounted to Rs. 382 crores, an average of over Rs. 38 crores per annum. These imports of gold and silver may be said to represent the investment of savings but it is investment of an unproductive kind. If these savings.........were invested in productive undertakings in India,.........it would be unnecessary to borrow abroad............it would be possible............in a comparatively short time, to repay the whole of...sterling debt."

variety of ways, is regarded in the West as an indication of a high standard of living, and there is no reason why we should grudge to Indians of the middle and the lower classes a similar luxury on an extremely moderate scale.

The habit of hoarding is fostered by insecurity, the absence of a trusted government, ignorance and by a love of ostentation and display. The hoard of an average family in India consists of the trinkets on the persons of women and children and rarely of men. Education will cure the Indian population of this love of ornaments but even in progressive countries fashion dictates the locking up of large amounts of wealth in plate and jewellery. In India jewellery has been the average person's bank which yields no interest and does not always ensure security. But it is the easiest and the most convenient method of saving and keeping wealth, in the absence of the facilities for and a knowledge of the advantages of banking. The trinkets are given as a pledge to the money-lender and on their security loans are raised. This gold and silver is thus a kind of banking reserve with indigenous bankers. The social customs of the people require that married women must have a certain quantity of jewellery on their persons and among Hindus the 'Stridhana' is the exclusive property and the stand-by of women. As soon as a man has made a small saving, he will hasten to convert it into ornaments for himself, his wife and his children. Even people of the middle class have often to pledge their jewellery for raising industrial and trading capital as well as for tiding over family difficulties. As soon as the purpose for which the jewellery was pawned is fulfilled, the profits are once more turned into ornaments. With the establishment of peace and orderly government under British rule, has come security of life and property, and ornaments need no longer be the deposit bank of any class of people. But it is ignorance, a lack of banking facilities and old customs that still stand in the way. Our princes, chiefs, noblemen, jamindars and other wealthy people have not yet become familiar with modern methods of commerce, industry and banking. They are slowly coming to understand the benefit that may be derived from the investment of their surplus income in Government securities and in industrial enterprises, and that is a very hopeful sign. That Government's currency policy likewise encourages the hoarding of gold, has been implicitly admitted by the Hilton Young Commission.

71. Conditions of Saving:—There are other conditions besides security of property which make accumulation of capital possible. The income of individuals and communities must be sufficient to enable them to lay by wealth for future use. Foresight and thrift are also equally necessary. There are persons who take no thought of the morrow and do not realise the importance of providing against a rainy day. The ambition to live a life of independence and ease and to make provision for the proper bringing up of children, is likewise an important factor. In backward communities and classes these motives are absent or feeble. Instances are not wanting in India of persons who will stint themselves to provide for the education of their children, to give them a start in life or to leave to them a decent source of income. The indebtedness of the common rayat and the artisan shows that this motive is not strong in him, but it is more the result of his poverty and ignorance than of extravagance. Social customs, traditions and prestige have likewise much to do with waste of wealth which could have been better saved and economically employed.

Under the modern industrial organization, wealth is coming to be concentrated in a few hands, and the margin for saving is so large in their case that they do not know what to do with the surplus. Profits of commerce and industry, which were very high owing to war conditions, in large cities like Calcutta and Bombay and which were in large part wasted in speculation, return in part for investment as capital. *There is no true abstinence in their case* because there is no sacrifice involved. People will not also save unless they have the means of securely depositing their savings or can use them remuneratively. There must, therefore, be sufficient scope for investment as well as satisfactory provision for the safe keeping of the savings, large and small. These opportunities are now opening out before all classes in India; and co-operative societies, joint stock companies and commercial undertakings which are rising in all directions, are an unmistakable proof of this development.

That the motive to save has not been very strong among all classes in India and that there is a deplorable tendency to spend beyond one's means, on ceremonies and festivals, may be readily admitted. But curious views are held by some in this connection and they are not justified. Prof. Marshall thus says of the Indian people :—" They make inter-

mittent provision for the near future, but scarcely any permanent provision for the distant future; the great engineering works by which their productive resources have been so much increased, have been made chiefly with the capital of the much less self-denying race of Englishmen."[1] Prof. Marshall clearly did not know that wealthy bankers have flourished in India from time immemorial and that rest houses for travellers, roads, wells, canals, 'ghats' on river banks, tanks, water-ways, mansions, parks, gardens and other works were constructed with the savings of the Indian people long before British capital could come to this country, and these old works are a monument to the patience, foresight and self-denial of the misunderstood Indian races. And it may be asked, when did Englishmen begin to accumulate capital in large quantities, to use it for big engineering works and to lend it to other nations? Again, was it not the enlightened self-interest rather than self-denying altruism that prompted the saving and the lending activities of the English nation? It is so unhistorical, unscientific and grossly unfair to judge a poor and backward people by the standard of a wealthy and advanced nation and to apply the same test to peoples differently situated, politically and economically.

72. Power of Capital :—The conflict between capital and labour, which has become intensely bitter in western countries and the socialist movement which has spread widely in the world, show what great power capital is supposed to exercise in modern times and how its despotic rule is being strongly resented and counterattacked. Capital is only one of the factors of wealth-production, but it so dominates the economic organization of the present day that the modern industrial regime itself has been characterized as capitalistic. Though the theories of socialists like Karl Marx, according to which labour is the sole cause of value and is, therefore, entitled to the whole output of production, are exaggerations, they only indicate how strong is the feeling of resentment that has been aroused in the minds of workers against the wealth and power of those who command capital and can, therefore, control labour. It is the concentration of capital in a few hands and the wage system under which the workers feel that they are made to toil like slaves without any share in the management of industry and are robbed of their due reward and social status by the employer, that

1 Economics of Industry, page 121.

have led to the revolt of labour, and it is to fight the power and the organization of capital that workmen's associations have been formed. Economists[1] distinguish between two different conceptions of capital, (1) the technical and biological notion of surplus wealth laid aside or used as production goods, and (2) the social and legal idea of economic power our savings and means of production claimed as private property and used to earn an individual income. This is the organized power of exchange economy which enables the possessor of goods to control as well as to promote the development of industrial and commercial activity of the community. The second concept of capital applies predominantly to modern industrial societies, and the first to undeveloped communities.

In India, industrial organization is yet mostly of the simple kind. The Jamindar or the big landlord is a capitalist as well as a monopolistic dispos r of land so much sought for, and wields enormous power. The position of his tenants is one of helplessness and the State has had to intervene to protect them by special laws. The owner of land is often the sowkar of the tenant, and his grip over the latter, is all the firmer in that case. The professional moneylender is, of course, a capitalist whose capital is, however, mostly 'lucrative' capital. He is usually looked upon as a great tyrant because he exacts outrageously high rates of interest for the capital he lends. The borrower seeks a loan for purchasing necessaries of life or the raw materials and implements of his industry, and by mortgaging his land and pledging his trinkets, becomes the slave of the money-lender. As he can command labour, the capitalist, whether urban or rural, must wield considerable power, and workmen, ignorant, helpless and unorganized, are at his mercy. Like the Jewish usurers of Europe, the Indian money-lenders have acquired a bad name, but it will be unjust to tar the whole class with the same brush. If some money-lenders are extortionate and harsh, others are sympathetic and considerate, and the village money-lender is often the friend of the rayat and the craftsman. The power of the money-lender can be reduced only in proportion to the improvement in the credit of the cultivator and the artisan. Better credit and banking facilities are already having their beneficial effect. The usurious

1 Rodbertus and Ad. Wagner. See Adolf Weber's Allgemeine Volkswirtschaftslehre and also W. Heller.

money-lender is, however, still powerful where unproductive and consumption loans are concerned.[1]

The relations of capitalists and workmen are, in India, mostly regulated by custom, and it is only latterly that labourers have become conscious of their importance and rights. The customary attitude of debtors, tenants and labourers towards capitalists and employers, is one of submission and resignation which is at times carried to the verge of slavishness. This phase of economic development is now passing away, and a new spirit is abroad among the working classes. They are no longer deferential, docile and dutiful and are slowly becoming independent as varied avenues of work are being opened to them and the demand for their labour is steadily increasing. The evolution is, therefore, from status to contract, and is the result of changing economic and political conditions. The spread of the factory system and the aggregation of hundreds and thousands of workers in mills, are tending to reproduce western labour conditions in India and the economic conflict has already been initiated. The numerous strikes of recent occurrence are an index of the economic change which can not be mistaken. The spirit of conflict has now extended to the relations subsisting between Zamindars and 'kisans' in northern India and elsewhere.

73. Foreign Capital in India :—We have already pointed out that most of the large industries in India, particularly the manufacturing, mining, engineering and planting industries, are financed by foreign capital. For the construction of such public works as railways and irrigation works, the State has adopted the policy of attracting British capital. The country has surely benefited by this policy inasmuch as those productive works could not have been otherwise carried out. London is the largest source of capital for British colonies and foreign countries, and England had, on an average, before the war, about Rs. 300 crores to lend every year. Capital has become cosmopolitan and is comparatively cheap in western countries. The railways in the Colonies and in countries like China and Turkey, have been constructed with the help of English,

1 The Famine Commission of 1880 observed:—"However just may be the terms of abhorrence applied to the "Marwari" or foreign usurer, it must be remembered that he is the product of a diseased condition of the community. The like condemnation must not be extended to the village banker of the better class with whose useful services the rural communities of India have at no time been able to dispense."

American and French capital. Exported capital goes out in the shape of manufactured goods such as steel rails, rolling stock and locomotives; and the lending nations compete with one another in supplying them as it encourages their industries. Dissatisfaction is often expressed in England that so much capital goes out of the country every year to fertilise foreign economic enterprise and that indigenous industries have to starve. It is obvious that on account of the wastage of the disastrous war, capital will be scarce and dear in the world for some years to come, and India will be largely thrown upon her own resources.[1] In one way this will not be an undesirable effect as saving will thereby be stimulated and larger amounts of indigenous capital will be available for our trade and industries.

The benefit which the importation of foreign capital has conferred upon the Indian people, is duly recognised; and any opposition to the employment of foreign capital as such will be unreasonable. Capital, like labour, must be paid its price and a country which does not possess capital of its own, must import it for its economic development.[2] The objection, however, is raised, as has been well said, not against foreign capital but against the foreign capitalist who exhausts our national resources and takes away profits out of the country. He is not willing to train Indians to become skilled experts and managers and relies upon imported labour instead. He is not also content with the normal and reasonable rate of interest on the amount of finance he supplies. He is not, therefore, merely a capitalist but an industrialist wanting profit as well as interest. Besides this disadvantage of the employment of foreign capital, there is another, viz. that it creates strong vested interests and foreign capitalists show an invariable tendency to oppose measures of political and other reform which, in their opinion, are calculated to threaten the security of their investments but which, in reality, are necessary for the economic and the all-round progress of the country. The cry of 'capital in danger,' is as frequently heard as the cry of 'religion in danger' when question of reform are mooted. The

1 The present position of the U. S. A. as the great creditor of Europe, holding thousands of crores worth of gold and of European securities, is almost unique in the history of the world.

2 "The great mistake to be guarded against is that because certain capital used in India is foreign, it must, therefore, do harm to the country. It has, of course, to be considered that we ought not to pay too high a price for it."—Calcutta Industrial Conference, 1906.

foreign capitalist can not and does not look at Indian economic questions from India's national view point. The latest illustration of this is found in the outcry of expropriation and racial discrimination against the proposal before the central legislature regarding the reservation of coastal trade to Indian-owned shipping. It is poor consolation that foreign capital enables additional wages being paid to indigenous labour when it secures the cream of the benefit of industry for itself. Mr. Dutt characterises the employment by the State of foreign capital for its railways as an instance of 'the right use of foreign capital'; and equally right will be its use if only interest had to be paid on it and it were employed by Indians who would derive all the profit out of its employment. It has, therefore, been maintained: "when we turn to the petroleum industry in Burma, the gold mines of Mysore, the coal mines of Bengal, the tea and jute industries, the carrying trade by sea and the financing of our vast foreign trade by foreign banks, we come upon another and a less favourable aspect of the question of the investment of foreign capital. It is impossible to estimate accurately the amount of wealth that goes out of the country in this manner, though an approximate idea can be had of it from the excess of our exports over our imports after omitting government transactions."[1] The question of the employment of foreign capital has come into special prominence in connection with the policy of protection adopted by the Indian legislature and government. It was contended that if the country was called upon to pay for the protection of industries, it was entitled to insist upon certain restrictions being imposed. The Steel Protection Act of 1924, therefore, provided for the technical training of Indians in the manufacturing processes, registration of companies in India with rupee capital and the presence of a number of Indians among their directors.[2] An external capital committee was appointed

1 Speaking of the successful exploitation of the petroleum fields of Burma Mr. (Now Sir) Thomas Holland observed in a paper read before the Industrial Conference in 1905:—"The one regrettable feature is the fact that the capital required to drill the deep wells has been raised in Europe, and the profits consequently have left the country. In the petroleum industry, as in so many other enterprises of the kind, India will continue to pay such an unnecessary and undesirable tax as long as those in the country who possess money will not risk their reserve fund in industrial purposes."

2 Read the debate in the Legislative Assembly, September session, 1928, on the labour strike in the Tinplate works at Gulmori.

to go into the whole question thus raised and to recommend a general policy. A summary of the report of this committee is printed as an Appendix to this chapter. The growing tendency of foreign capitalists, including the Japanese, to start industrial and commercial establishments in India, is significant.

74. Capital and Banks:—The subject of banking and credit will be separately dealt with in a subsequent chapter. We have to refer here to the facilities that at present exist and that must be provided in order to make industries more productive and to assist the starting of new ventures. During recent years, banking has made considerable progress in India in spite of the failure of several indigenous banks in 1913. The big concerns of the western type viz. the Presidency Banks, now amalgamated into the Imperial Bank of India, Exchange Banks and Indian Joint Stock Banks are almost exclusively concerned with the financing of trade and supplying working capital to the bigger industries. All of them receive deposits, make loans and deal in bills of exchange, the second class of banks buying and selling foreign exchange, besides. The total deposits of the Imperial Bank, the Exchange Banks and the principal joint stock banks now exceed 200 crores, the amount in the case of the last alone being 60 crores. Compared with western countries, India is very backward in banking and, therefore, in industrial development. There are, besides, Indian shroffs and bankers who likewise finance internal trade. Upon them falls almost exclusively the duty of finding finance for the movement of crops from the interior to the ports and for the current requirements of agriculture. The savings of the people are, however, deposited with the above named banks and with Postal Savings Banks, the deposits in the latter amounting to over 29 crores of rupees and co-operative credit banks contributing their quota of like amount. The banking habit is certainly growing upon the people, and the war loans and cash certificates have provided a very useful practical lesson of the advantages of investing even small savings. More banks and investing facilities are, however, needed and the banks must be scattered all over the country, collecting small amounts and lending them for productive purposes. The banks do not reach the small cultivator, craftsman and trader and if co-operative banks are excepted, it may be stated that the rural and urban sowkars are the sole source from which loans are obtained. These money-lenders

charge high rates of interest, anything between 10 and 70 p. c., according to their opportunity and the position of the borrower, and it is not a wonder if the debtors are ruined instead of benefiting by the loans of capital. The Tata Industrial Bank was a step in the right direction and was expected to supply capital to new industries. But owing to post-war depression, it had to be amalgamated with the Central Bank of India. Many such banks, independent or State-aided, are required for the financing of industrial ventures, particularly the smaller industries.

There is unanimity of opinion that the assistance rendered by the existing banks is absolutely inadequate, and more banks must be started and scattered all over the country. The Imperial Bank has opened new branches in various centres in the country, but such banking institutions may not be able to give credit for long periods required for industries, and special industrial banks will have to be established with State assistance. There is so much State money, it is felt, lying in the Reserves of the Government and it may be made available, in suitable ways, for the encouragement of indigenous industries. Crores of rupees belonging to the Paper Currency, and the Gold Standard Reserves have been lent in England; they may be kept in India and be utilized for the promotion of economic development in this country, of course, with the essential safeguards. There can be no doubt about the fact that the existing financial machinery by which village and town sowkars and shroffs, joint stock banks, the Imperial Bank and Exchange Banks, together with the co-operative credit societies and the Government, which give loans to agriculturists for improvements, supply capital to Indian trade and industry, is unequal to the requirements of the economic progress of the country. The Industrial Commission gave its best attention to the problem of the finance of indigenous industries, and its report contains several valuable suggestions regarding the help which the State can and ought to render in this connection. It has considered the lines on which industrial banks should be conducted and the terms on which Government should assist industrialists with the capital they need. This is a question which the State in India must seriously tackle if it is to play any important part in the promotion of the economic progress of the country. Industries are now a 'transferred' subject in the provinces; and assistance is being given, to a small extent, to industries in the shape of the advance of

capital by some Provincial governments. Government's policy of giving agricultural loans and advances to cultivators under the Land Improvement Loans Act of 1883 and the Agriculturists' Loans Act of 1884 has not proved a success and salvation has had to be sought in the co-operative movement.[1] Discussing the operation of the latter of these two Acts whose scope is explained in our foot note, the Agricultural Commission came to the following conclusions :—" The Act can never be the means for meeting all the normal requirements of agriculture ; but is of great value in certain contingencies......We are of opinion that the Act must remain on the Statute Book until the spread of thrift or of co-operative credit or of both renders it obsolete. "[2]

The illustration shows how deficient is the supply of agricultural capital, and what is true of agriculture is also true of other indigenous industries, large and small, and particularly, the latter. The little savings of the people, it need not be repeated, will have to be collected in banks scattered throughout the country and must be supplemented with State funds where necessary. In France, for instance, the State assists agricultural and other associations with capital in this way.[3] Of course, a sound system will have to be devised under which the object in view will be attained with safety to the tax-payer and consistently with the healthy progress of indigenous industries and banking. Co-operative credit societies are playing an important role in connection with the capital needs of the

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1. " The former enactment authorises the grant of loans by local officers subject to rules laid down by the local Government for the purpose of making any improvement, an improvement being defined as any work that adds to the letting value of land. Wells take the first place among such works. Loans are repayable by instalments and recoverable generally as if they were arrears of land revenue. The Agriculturists' Loans Act makes similar provision for advances for other purposes, not specified in the Land Improvement Loans Act but connected with agricultural objects, including the relief of distress, the purchase of seed and cattle. The rate of interest on Government advances is 6¼ per cent. (one anna in the rupee) or less as compared with 12 to 24 per cent or more exacted by the village money lender ; but advances are made only for specific purposes, they entail more formalities than the village loan and the repayment is enforced with greater rigidity, so that in the past Government loans, though large in the aggregate, have not had any great influence on the agricultural credit of the country ":—Moral and Material Progress Report, 1911.

2. Report, Para 362.

3. See Gide's *Principles of Political Economy*.

agricultural population and the number of the members of these institutions and the amount of working capital dealt with by them are steadily increasing. Land mortgage banks are a suitable agency for financing agricultural improvements needing long-term credit and they have been now started in some Provinces. Similar effort seems to be called for to promote the growth of small sized urban and rural industries which have to pay a heavy toll to-day to the money-lender and middle man and whose expansion is arrested and whose very existence is threatened. The possibilities of development in this direction are immence and Indian agriculture is bound to show greater improvement with expanding facilities of credit and capital. Popular education in the widest sense of the term, is a preliminary and an adjunct of this movement and until that problem is vigorously tackled, advance is bound to be slow and unsatisfactory.[1]

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1. On this and other problems relating to rural conditions and improvement, read Prof. S. Kesava Iyengar's *Studies in Indian Rural Economics*.

APPENDIX

FOREIGN CAPITAL IN INDIA

Report of External Capital Committee.

The report of the External Capital Committee, appointed by Government in accordance with the promise given by the Honourable Sir Charles Innes in the Legislative Assembly on the 5th June, 1924, to consider the question of the flow of capital into India from external sources, is summarised below:— The Committee have not attempted to estimate the amount of external capital in India as any such calculation must be largely guesswork. They do not think that any practical purpose would be served by such an estimate. As a general principle they hold that the inflow of external capital is not only unobjectionable in itself, but that it is a valuable factor in assisting the economic development of the country and in increasing its wealth and employment, though they believe that it is even more advantageous that India's requirements of new capital should be supplied from internal sources, so far as internal capital is forthcoming. India possesses a large store of dormant capital awaiting development and in order to make this available for investment they suggest that a preliminary survey should be undertaken by Government without delay of the whole field of banking organisation and credit facilities in India, this preliminary survey to be followed by a detailed examination by experts. The following are some of the questions, a detailed examination of which the Committee consider would be most likely to lead to fruitful results.

BANKING FACILITIES.

The first is the question of increasing the facilities for deposit and investment by the creation of new branches of the Imperial Bank, the extension of the facilities of existing banks and the formation of new banks. They also suggest an examination of the indigenous banking system in order that the credit facilities which they now afford may be fully utilised and further developed by being fitted into the modern banking system, and of the various proposals for Government control of joint stock banks. The most important question is the provision of a comprehensive scheme of banking

education which will furnish an adequate supply of Indian bankers trained on sound and modern lines. One of the first points for consideration in this connection would be the desirability of creating an all India institute of bankers to supervise courses of instruction combining both practical and theoretical training in banking. As regards the facilities for investment, they consider that as fresh capital must, if progress is to be healthy, be attracted first into investments in which safety is the primary consideration, steps should be taken to encourage dealings in Government securities by extending the Public Debt Office facilities to the more important commercial centres outside the presidency towns thereby creating more money markets throughout India, constituted on modern lines.

Other questions of importance are a co-ordinated examination of the machinery for the provision of credit to agriculture and to industry either by direct Government assistance or through industrial and co-operative banks, and the development of negotiable instruments so that they can take their proper part in the financing of Indian trade.

RESTRICTIVE MEASURES.

Turning next to the question of imposing restrictions on external capital, the Committee distinguish between different forms of external capital according to the extent to which such capital carries with it control over Indian industrial organisation and Indian natural resources. According to this criterion, external capital is divided into three categories, namely :—(1) Investments in which the external investor is merely entitled to a stipulated rate of interest and only acquires rights of control when there is default, as in the case of state and municipal loans, bonds and debentures of private companies, and bank loans; (2) Investments in which the external investor enters into competitive business on equal terms with Indian enterprise as in the case of cotton and other textile mills, mercantile houses and the like; and (3) Investments in which the external capitalist acquires special privileges or concessions of land which give him exclusive possession or exclusive rights of exploitation of particular portions of the natural resources of India. As regards class (1), the Committee do not consider any measures of control necessary, but in the case of Government and quasi-Government loans they add that the rate of interest should not be the sole consideration in placing such loans, and that, other things being equal, preference should be granted to the Indian investor.

PRACTICAL OBJECTIONS.

After careful consideration of the various devices suggested for imposing control the Committee have come to the conclusion that restrictive measures would be either impracticable or disproportionately injurious to the

Indian investor in cases falling under class (2). Most general of these suggestions for control are the registration of new companies in India with rupee capital, and definite reservation to Indian investors of a proportion of the shares, stipulation for a definite proportion of the directors being Indian, and for facilities being afforded for training of Indian apprentices, and the imposition of penal taxation on companies which do not comply with these conditions. The Committee point out that these suggestions could only be applied to new companies, and that they would entail a very elaborate system of trade licensing and inquisitorial government control, which would tend to prevent the development of private companies into joint stock companies. Restrictions on the transfer of shares from Indians to non-Indians might possibly increase the yield in certain exceptional cases, but this would be largely counterbalanced by their lower sale value on account of the absence of an open market for the sale of investments. Further practical objections are the probable evasion of the restrictions by the large capitalist, and the increased difficulty to the small investor of finding purchasers, for which brokers would naturally charge an enhanced commission. The Committee's objection to a statutory minimum of directors is based on the right of shareholders under ordinary circumstances to have an unfettered control over their own directorate, and on the principle that it would be unadvisable and uneconomic to compel companies to labour under a proportion of directors whose business qualifications were only a secondary consideration.

THE RECOMMENDATIONS.

The Committee are also opposed to keeping subscription lists for new or additional capital open to Indians for a prolonged period as, if Indian subscribers were subsequently allowed to sell them in the open market without restriction the effects of such a policy on the ultimate control of the company would be negligible while the dislocation created to the commercial machinery of the country by such a general provision would be incalculable. Pandit Madan Mohan Malaviya, while recognising the force of this argument, holds that some such action is desirable on the ground that there would be some residuum of additional Indian holdings as a result. Where, however, definite concessions are granted to particular concerns, as in the third class of external capital, they agree that definite restrictions might be imposed. They would subdivide this class further into two :—(I) Where the foreign capitalist acquires a definite pecuniary concession such as a bounty, and (2) where he acquires a concession which will enable him to exploit a wasting asset such as a mineral concession. In the first case they consider that restrictions might be imposed of the nature described in Section 5 of the Steel Industry Protection Act of 1924, namely, that companies should be registered in India with rupee capital, and a reasonable proportion of Indian directors, and reasonable facilities for the technical training of Indian apprentices should be

provided. As regards mining and similar concessions, they are of opinion that no definite proportion can be prescribed, and the matter must be dealt with by the expert departments of Government concerned, the general criterion being that concessions should only be granted to external concerns where it is clearly in the national interest that they should, and where internal capital is not forthcoming on reasonable terms, and then only subject to such safe-guards as may be suiable for each case.

Lastly the Committee do not consider it necessary to examine in detail the measures to be taken to give effect to those recommendations as they do not suppose that any general legislation will be necessary. If Government accept them, the necessary legislative and executive steps can be taken to give effect to them on each occasion when a bounty or similar concession is granted.

CHAPTER VII

ORGANIZATION OF PRODUCTION

75. Function of Organization :—To the three factors of wealth-production so far considered viz. land, labour and capital, a fourth is usually added, and it is called organization. The existence of this factor is not felt when the industry is small and the mode of production is simple. A petty farmer, for instance, produces a crop by labouring on his own land with the help of implements and subsistence provided entirely out of his personal savings. Here only three factors of production are apparently present and the element of organization is inconspicuous and hidden from the view because it is a part and parcel of labour and is indistinguishable from it. But a large farmer must engage the services of labourers and may have to borrow a part of the capital that is necessary. The bringing of the essentials of production together and the management of industry constitute organization; and the value of this work grows with the increasing dimensions and complexity involved in the production of wealth on an extensive scale and for a large market. Knowledge, forethought, enterprise, daring inventiveness and other qualities are needed for the successful organization of large-scale industries in which the elements of production can not be contributed by the same individual. Profit is the reward of the service rendered by the organizer, as rent, wages and interest are the remuneration for the contributions of land, labour and capital respectively. Industry is organized in different forms and the skilful manipulation of the factors of production makes them efficient and capable of yielding higher returns. Producing commodities for a wide market often in anticipation of demand, assumption of risk involved in unexpected changes in demand and price, proper selection of materials and labour and skill in disposing of the output, are the chief characteristics of an *enterpriser, entrepreneur* or *unternehmer.*

The evolution of the organization of production can be traced through its different stages from the self-sufficing form of individual or family wealth-creation to the factory regime of modern times.

Production upon a large scale, with the assistance of armies of operatives and of vast quantities of capital for an extensive market, is the most striking characteristic of the present day. The use of machinery, the easy and plentiful supply of capital and improvements in the means of communication, have produced remarkable social and economic effects. The cultivator no longer produces for his own family or his own village but supplies, though unconsciously, the most distant markets with the produce of his field. The artisan is no longer an autonomous worker plying his tools at home and the owner of the commodities he turns out. The craftsmen, as independent workers, have been displaced by employers of masses of labour and machinery, and they have been reduced to the condition of people working for a wage in factories owned by huge companies or by wealthy individuals. The old local and national markets have become wider and international, and a minute division of labour and concentration in production, specialization and integration of industry, have been the result.

In these circumstances, the function of the organizer, the 'entrepreneur', is one of no little difficulty and responsibility; and his remuneration is correspondingly high. Before putting his hand to an undertaking, he has to estimate the extent of the demand for the goods proposed to be produced, the prices at which they will sell, the aggregate costs of the manufacture and the margin of profit that may be expected. Errors in the calculation are attended with serious risks and some of his anticipations may be falsified either by a wrong judgment or by an unexpected turn of events which he can not control. The margin for mistakes or misfortunes is exceedingly small on account of the keen competition which prevails. The element of speculation which thus characterizes the organization of production, is one of the evils of the modern factory system, and it has given rise to other evils such as those of combination trusts, cartels and monopolies. The gains of individual capitalists and organizers are often incompatible with social interests, which the state has to interfere to protect. The advantages of big undertakings are obvious and it is not always easy to secure them without sharing the harm associated with them. Skill of the organizer consists in the acquisition and the use of the factors of production on the principle of maximum results at minimum cost; and every economy and improvement contributes to success. The

daily advance of science increases the facilities for industrial undertakings while, at the same time, it intensifies competition.

76 Home Industry:—Where life is very simple, a family is self-sufficient, producing every thing it needs, except perhaps a few articles which can not be produced at home. The use of machinery is both a cause and an effect of a minute division of an industry into different operations. Specialization is to be found not only in connection with separate crafts but also within distinct branches of the same craft. This industrial evolution may be marked in the economic history of every community, and India is no exception to the general rule. The 'capitalist' or 'factory' system has not, however, entirely superceded the domestic or craft system even in western countries, and this phenomenon is more remarkable in India than elsewhere. [1] Here large industries and large farming are exceptions and despite the encroachment of modern methods of production and transport, the industrial organization of the old type still persists, providing employment for the vast bulk of the population. Organization may take any of the following forms: (1) the cottage industry in which the autonomous producer owns his capital and the output of his labour; (2) the home industry distinguished from the preceding by the fact that, though working in his own home, the producer is supplied with capital in the shape of raw material by an employer who remunerates him for his labour and claims the finished article; (3) the manufactory, where the premises, tools, machinery and raw materials of the industry are furnished by a capitalist owner who engages the services of workmen on a wage contract; (4) partnership business where the making of the above arrangements may be shared by two or more individuals; (5) the expansion of the preceding into the factory system worked on the joint stock principle; and (6) combinations, in various shapes of such large undertakings, e. g. trusts. These forms are not absolutely exclusive and may

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1 "Even now-a-days, although the factory is the charateristic mode of industry, all the other forms are still to be found. We see traces of domestic industry in the peasants' houses where the wife bakes the bread and spins the flax for the household linen; and in some of the provincial towns where jam-making, ham-curing and washing are done at home and have not yet become industries. In all towns a large number of artisans may still be found plying divers trades and working for their customers as in the Middle Ages. And there are still manufactories which employ only hand labour."—Gide: Political Economy.

overlap one another with regard to some of the distinguishing features as will be indicated below.

Almost all the old indigenous industries are on a small scale and are carried on in the homes of the autonomous workers. The spinner, the weaver, the potter, the blacksmith, the coppersmith, the goldsmith, the oil presser, the leather worker, the tailor, the dyer, the shoe-maker—are all producers of this type. They own the simple tools of their trades, but have very often to depend upon the neighbouring money-lender for the supply of raw materials and food &c. Very rarely cultivators and craftsmen may combine and carry on their business on the partnership principle. Partnership has been well-known in India from very old times and is generally practised in trade and farming which can not be well managed by a single worker, though assisted by the members of his family. We have references to trade and industries conducted by partners and to the rules regulating such organization in the most ancient Indian literature, and the partnership principle seems to have been extensively practised.'[1] Autonomous producers work in their own homes and turn out goods which command ready sale in the local or the neighbouring market. Some special products of well-known places, *e. g.* Benares silks, are in demand in distant parts of the country. The craftsmen will also work to the order of local customers, but this demand is not sufficient and their goods are generally purchased by the merchants in the locality, who send them to different markets.[2] Craftsmen working in their own homes may not often be

1. See Kautilyas's Arthashastra and Mujumdar's Corporate Life in Ancient India, as also the Economic History of Ancient India by Prof. S. K. Das.

2. "The arts and manufactures of India are more easily separable into sections, corresponding with hand labour and steam power, than are those of most countries; for handicrafts in spite of the mechanical development of the past century, are still very important to the Indian people. The carpenter, the potter, the blacksmith, the weaver, the dyer, the tailor, the shoe-maker and the sweetmeat-maker are recognised members of most village communities. The higher crafts—those of artistic workers in wood, clay, stone, metals and textiles—are carried on in special localities and in direct relationship to physical and administrative conditions. When, for instance, hand labour industries are practised on a large scale they tend to become centralised in important towns. Steam-power manufactures are not in any way indigenous industries; but have been originated, and are controlled, by the supply of raw material and fuel, by the facilities of transport and by the degree of association with European enterprise."—Decennial Report on Moral and Material Progress, 1913.

autonomous producers. The merchant, who is also the money-lender of the village or town, gives out pieces of work to be done in the homes of the craftsmen. He supplies the raw material, rarely also the tools, and takes away the finished product, paying the worker what amounts only to a small wage. Some times there is a subordinate undertaker between the top entrepreneur and the actual craftsman who likewise may employ operatives himself to assist and work under him. The actual worker is thereby relieved of all responsibility and escapes the trouble involved in finding capital and disposing of the finished product. But he is, at the same time, reduced to the position of a drudge, and the sense of ownership and independence is entirely lost. The capitalist may also set up a factory in his own house and require the craftsmen to work there. He supplies the tools and the raw material, and the workers are mere wage-earners, not having the satisfaction even of working in their homes. They share neither responsibility nor the profits of the trade. Instances of this form of business organization are found every where throughout the country.

77. The Manufactory.—An employer who finds that there is a good and steady demand for a certain commodity in a locality, will organize an industry in this way in a town, on account of its large market or transport facilities; or artisans may be attracted to such an industrial centre by tempting prospects. Such industries are to be found organized in moderate-sized towns where a larger variety of goods is in demand than in rural areas. Rajas and noblemen used to invite craftsmen to their towns and to give them special facilities to settle and ply their trades. The immigration of artisans led to the prosperity of the town as well as their own, and the localization of certain industries in the cities of old, in the times of Mahomedan and Hindu rule, may be traced to this cause.[1] It will be observed that a variety of definite conditions necessitates and favours the setting up of this class of moderate-sized manufact-

1. "The silk and embroidery industry of Poona was entirely due to the encouragement given to the foreign settlers from Burhanpur, Paithan and other towns to come and live under the Peishwa's protection on house sites which were granted free to them. Individual merchants were encouraged in large towns to open shops with the help of Government advances."—Ranade: Intoduction to the *Peishwa's Diaries*. This industry as well as the making of brass and copper vessels in Poona is now on the downward grade owing to decline in demand and the competition of cheaper and machine-made goods.

eries. There is a pretty constant demand for certain commodities the manufacture of which has been standardized; and a capitalist finds therein an opportunity for starting production. He studies the tastes of consumers, arranges for the supply of the raw materials of his industry, engages the services of skilled labourers and sells the output of the factory to wholesale, as well as retail traders. A good deal of organizing capacity is displayed in business of this description, and the numerous products of these industries may be seen in the bazar of any Indian town. Brass and silver vessels, toys, embroidered and plain dhoties, saris, turbans, shoes and slippers, 'bidis', woollen blankets, gold and silver ornaments, cutlery—in fact, the hundred and one articles of daily use in the Indian household are manufactured in small manufactories for sale in the bazar. Side by side with this system of production, goes on the home industry of the autonomous craftsmen. One serious weakness of the latter and to a smaller extent of the former also, is the lack of regularity, forethought, adaptability and ambition betrayed by the workers. The craftsmen possess ample specialized skill which is valued by customers, but they do not appear even to study their self-interest and are much less inclined to please their patrons by doing things in time. The crafts are, therefore, being slowly substituted by the factory or are passing into the hands of more enterprising men. Industries connected with men's and women's garments, domestic utensils, vegetable oil, sugar, foot wear, headgear &c. are typical instances.

The designs, finish and the durability of the products of the small industries are admirable. But improvement as to variety, efficiency and supply is beyond the capacity and resources and also the imagination of most organizers. The handloom weaving industry in India is a typical example, and the problem for anxious consideration in recent times has been how to enable it to stand the competition of power-looms. The output of the Indian cotton weaving mills has not yet been able to replace the quantity turned out by handlooms, and it is believed that if the weavers are supplied with improved appliances and capital and if the industry is better organized it has yet a good future before it. Attempts have been made to devise a suitable improved loom that may be used by the weavers with greater advantage, and weaving classes and small factories have also been tried. It is, however, difficult to say how far these endeav-

ours have met with any appreciable success, understanding by this last word, a more or less permanent footing. It is stated in the latest census report that of the handlooms in use in the factories of Bengal, more than one-third are fitted with the fly-shuttle, which is not nearly so common in Assam or Bihar and Orissa and is comparatively rare in the United Provinces. The fly-shuttle is more common in the Tamil districts of Madras and in the Hyderabad State. The Madras census report attributes the failure of the attempt to organize the handloom industry in small factories to the indolence and indiscipline of the workers and significantly maintains that 'the future of the handloom industry depends almost entirely upon the improvement of the hand weaver himself.'[1] A species of individualism, the existence of which is not appreciated and is consequently denied, inherent in craftsmen, resists and repels co-operation, combination and organization in economic activities among rural and urban workers. The small indigenous industries survive because they satisfy a special demand of local and distant consumers, which can not be met by the products of factories, foreign or Indian, or because cheap factory-made articles do not yet reach the interior parts of the country or because some people, at any rate, will purchase swadeshi articles even at a sacrifice.

78. Large-scale Production:—Concentration of capital and production of wealth with the help of machinery, render large economies possible and are calculated to yield high returns. A number of producers may thus combine together and the advantages of this kind of co-operation are obvious. Though co-operative production prevails to a certain extent in various countries, owing to peculiar causes, it has not, on the whole, made any notable progress. The expert knowledge and the organizing capacity, so essential for successful competition in the extensive markets of our times, are wanting in the workers co-operating for purposes of production.

1 "The weavers are exceedingly poor and in the main rely upon middlemen for the small amount of capital actually employed in their trade. They are ignorant and narrow-minded and averse to enquiries regarding the detail of their trade. Each man works for himself and there is little or no co-operation among them. There is no chance that any weaver may arise with an intimate knowledge of the technique of the trade and with a mind sufficiently wide to grasp the general trend of the economic forces which are gradually driving his fellow castemen to misery and despair. The only hope lies in the conduct of experimental weaving by the State with the object of working out by degrees a better system of production."—Chatterton: 'Agricultural & Industrial Problems in India.'

Weavers' and other producers' co-operating societies which already exist in India, show what may be attempted in that direction in the case of other crafts. In India, we have numerous associations for credit but there are very few societies for production, and in agriculture where the co-operative movement is spreading more widely, this form of association finds little favour. Two or three farmers often take land on lease and work it in combination, but this is exceptional. This system is often found in sugar cane growing and gur-making, in the Deccan. In a partnership business the persons combining may each contribute his share of capital or labour or organizing capacity or skill in management and thus may collectively bring together elements of success which individually they did not command. The 'sleeping' partner supplies capital and takes no active part in the management of business which is undertaken by another who does not contribute capital. One person or a few partners may not be expected to possess the enormous resources required to run a big factory and will not care to undertake the great risk involved. The collection of capital from a number of persons who take up a definite share of the financial responsibility and divide profits and losses in a corresponding proportion, is a method of industrial organization which, therefore, suggests itself as the most suitable in the circumstances. The development of the factory system in this country has been synchronous with the growing application to industry of this method which is based on the joint stock principle of organization. Under the factory system, which is the predominant characteristic of modern times, the small autonomous producer has no place and the economic evolution now going forward in India is a transition from the domestic and small to the organized and large-scale industry.[1]

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1 "The capitalist employer not only provides the raw material and disposes of the finished product, but also controls the intermediate process. The machinery is so costly as to be beyond the reach of the workmen: and since the machines are the property of the employer the building in which production is carried on, must also belong to him and is called the factory. The labourer is not his own master as in the handicraft system; he no longer owns the tools and the workshop as in the domestic system; all that he does it to provide the human labour force which is applied through machines and in work-places owned by the capitalist employers. The stupendous increase of production which is thus rendered possible reacts upon the labourer both as producer and as consumer. Population increases enormously, and there is a continual drift from the country to the city. Industrial society receives its modern shape, and the social income is divided into the rent of the landowner, the wages of the labourer, the interest of the capitalist and the profits of the entrepreneur."—Seligman.

Production on a large scale is sought because it makes for the reduction of costs and therefore for cheapness, which is the primary aim of economic activities. It enables better terms being obtained in the purchase of machinery, raw materials and labour and the distribution of the supervision and other 'overhead' costs over a large quantity of goods. The 'works cost' and the 'all in' price are, therefore, lower in a business whose capital and output are larger than in one whose size is smaller. The joint stock principle of association, it will now be clear, presents certain distinct advantages:[1] under it large enterprises requiring huge quantities of capital can be easily undertaken and persons of small means find in it an attractive method of investment on account of the liability for losses being restricted to the value of the shares held. While the partnership method of organization is common enough in India and co-operative production is yet to develop, the needs of production on a large scale, and with the help of machinery and power, call for the combination of capital, contributed by several persons who have savings to spare, and of the enterprise, the ingenuity and the organizing capacity of those who can utilize the capital and labour of others for wealth-creation in big factories. Realization of the advantages mentioned above, led to the rapid development of companies formed on the joint stock principle in western countries; and that example is being followed in India. Most of the European industrial and commercial enterprises in this country have developed into joint stock concerns. Railways, mills, engineering firms, factories, mines, tea gardens, banks, commercial organizations and other concerns are, for the greater part, joint stock companies. And almost all new industries started by Indians take this shape,

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1 "The company form makes possible the raising of capital for the very biggest enterprise. It enables the holder of small savings, who does not wish to use them in business himself, and who is not in close enough touch with business to entrust them to any private firm, to invest his saving remuneratively. It is equally useful to the holder of big savings, since it enables him to distribute his capital among many enterprises (and countries) and so avoid the risk of carrying all his eggs in one basket. Since shares in joint stock companies are usually saleable the investor can realize his property in a business without breaking up the firm; if he were a partner in a private firm and wish to withdraw his capital, either he must find some other capitalist to take his place in the business by buying his share, or he must risk breaking up the firm since it might be unable to continue without his capital. The joint stock company provides another opening for men with organizing ability but with no capital."—*Henry Clay.*

old individual concerns, when the need of expansion arises, being converted into joint stock companies.

79. Joint Stock Companies:—A business owned by a person or persons may be tranformed into a joint stock company, the change being dictated by the need for expansion or inspired by the profitableness or the convenience of the transaction. Many a concern is started as a joint stock company because that is the only way in which it can be brought into being. A shrewd business man perceives the possibility of successful wealth-production in certain favourable conditions or is approached by an industrial, scientific or mechanical expert with a business proposition. He studies the scheme in all its aspects and makes estimates of its working. If satisfied with regard to the chances of its success, he invites a few capitalist friends to combine with him to float a company. A prospectus is issued explaining the whole project and showing what profits will be made, and the public is invited to take up shares. The preliminary work of drawing up of the articles of association, allotting shares and so forth is done by the promoters, and a board of directors is chosen from among them to manage and control the affairs of the company. The 'authorised' capital is put at a higher figure than is represented by the immediate needs; a part of it is 'issued' and the whole or a portion of it may be 'subscribed' and paid up by the public, payment being made in a lump sum or in instalments as required. The company is registered under the special law in force in that behalf and has to submit to certain restrictions imposed for the safety of the shareholders. Complicated questions regarding the rights and liabilities of companies and shareholders arise from time to time and a large body of judicial decisions has grown up round the law governing the working of companies. The shareholders are so many capitalists, but since a large proportion of them are contributors of small amounts, their control of the management is only nominal and it is necessary to protect their interests through the enactment of special legislation.

Though an elected 'board of directors' supervises and controls the management of the affairs of the joint stock company, the actual management may be entrusted to one of the directors called the 'managing director' or to a separate firm of what are known as 'managing agents.' The latter form of administration is the one most widely

prevalent in India, [1] while the former is common in western countries. The institution of managing agents appears to be peculiarly suited to the conditions of India where industrialism is still in its infancy. It may be said in favour of the system of managing agents that members of those firms are, as a rule, business men of reputation, who have considerable experience of the working of industries, who have influential connections, who inspire public confidence and who command credit in the money market. The management of a company at the hands of such people is expected to be efficient and in the best interests of the shareholders. The system has serious drawbacks, however, on the other side. The managing agents have too many irons in the fire, being connected with the management of a number of companies, often engaged in different industries. They can not, consequently devote to their work that close and undivided attention which the affairs of a large industrial, commercial or banking company demand. Few of them are experts in the technique of the industries with which they are associated, and while their supervision and control are consequently slack, management is wasteful and improvements are difficult. Though the remuneration of the agents may be made to depend on the net profit earned by the company, the agents have conflicting and divergent business interests and have their eggs placed in numerous baskets and that fact is consequently not much of a check on them. A shrewd and active managing director would do the agents' work much better, but it is doubted if many such men are available in India—we feel, without sufficient justification. This question of the drawbacks of the system of managing agents assumed some prominence in the inquiry of the Textile Tariff Board, and the suggestion of the latter that at least one member of the firm of managing agents should have technical qualification in respect of the industry, is full of significance.

80. Statistics :—Reference has been made in the preceding chapter to the fever of company promoting, a wave of which swept

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1 It is peculiarly so in the Bombay cotton mill industry. "Almost everywhere there is the system of managing agency representing the original enterprise of businessmen who were willing to put down or to secure the capital, but the original energy has not survived in the second generation and is pointedly absent in the third. Managing agency firms are to-day drawing from the textile industry large direct advantages and various indirect advantages, for which it can not be said that they are giving any economic return to the industry."—*The Mirror of Investment*, 1927.

over the country immediately on the cessation of the war, and the depression which succeeded it. The comparative table given at the end of this section will give an idea of the sudden outburst and the setback. The total number of companies limited by shares, which were incorporated in India up to 1921-22 under the law relating to the registration of companies, was 10,783. Of these, 5,189 companies were working at the end of that year, most of the remainder having been either wound up, or otherwise discontinued or never having commenced business, so that over 52 per cent. of the companies registered ceased working. The total number of companies at work in 1926-27 was 5,535, and of all those registered up to that year, was 13,171. Some companies, it should be noted, have also been taken off the Indian register to be reconstructed as companies under the English law with their head offices in London, while after the outbreak of the war, some companies incorporated in the U. K. were taken off the English register and reconstructed as companies under the Indian Act. Small allowances have likewise to be made in other respects. All the companies registered in India have a rupee capital with the exception of the Hongkong and Shanghai Banking Corporation which was registered in Calcutta in 1869 with a capital in Hongkong dollars of which the rupee equivalent is stated. The number of companies at work and the capital invested in them stood as follows at the end of each of the four years selected:—

	1915-16.	1920-21	1924-25	1926-27
Number of companies	2,476	4,708	5,204	5,535
Authorised capital Rs. (1,000)	1,84,20,90	6,67,85,74	6,65,96,64	640,15,02
Paid-up capital Rs. (1,000)	85,02,45	1,65,46,24	2,75,52,85	2,77,03,19

The number of companies registered in Bengal is over two-fifths of the entire number registered throughout India, but the average paid-up capital per company is higher in Bombay and Burma, the Punjab, Delhi and Madras following at a distance[1]. The relative position of the Provinces with respect to industrial organization is indicated by these figures. Over one-fourth of the aggregate

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1 The average capital per company in 1926-27 in the Provinces was as follows:—

	Rs.
Bengal	3,98,000
Madras	1,69,000
Bombay	12,49,000
U. P.	6,00,000
Burma	9,38,000
Indore State	15,27,000
Hyderabad	9,41,000

paid-up capital is invested in mills and presses, chiefly for working and pressing cotton, jute, wool and silk. A great number of mills and presses are registered in Bombay, that presidency representing a substantial proportion of this sum, most of it being in cotton mills and presses. Further information on this point may be obtained from the following statement showing the distribution of the aggregate capital in the principal classes of joint stock enterprise at the end of 1926-27 :—

	Class of Companies.	Number	Paid up Capital
			Crores of Rs.
I	Banking, loan and Insurance ...	1,265	25
II	Transit and Transport (Navigation, Railways &c.) ...	218	30
III	Trading and Manufacturing (Iron, Steel, Shipbuilding, tanneries, glass, tobacco) ...	2,134	69
IV	Mills and Presses (cotton, jute, flour, oil, timber, rice &c.) ...	741	72
V	Tea and Other Planting ...	544	12
VI	Mining and Quarrying ...	338	42
VII	Estate, Land, Building ...	113	7
VIII	Breweries and Distilleries ...	13	·5
IX	Sugar (including jaggery) ...	36	2
X	Others, including Hotels ...	137	7
	Total ...	5,535	277

II

Company Flotation

Year	Number of Companies	Index Number (pre-war year = 100	Aggregate authorized capital	Index Number (pre-war year = 100)	Average authorised capital per Company
			Rs. 000's omitted		Rs. 000's omitted
1913-14 pre-war year	356	100	66,91,53	100	18,79
1918-19	290	81	21,27,55	32	7,34
1919-20	948	266	2,81,76,12	421	29,72
1920-21	1,039	292	1,48 03,70	221	14,24
1921-22	720	202	79,79,64	119	11,08
1922-23	489	137	29,80,96	43	6,09
1923-24	430	121	24,94,78	37	5,80
1924-25	416	120	21,23,25	31	5,10
1925-26	472	133	30, 06,08	45	6,37
1926-27	529	149	19.39,09	29	3,67
1927-28	595	167	15,82,37	24	2.66
1928-29	732	206	27,26,62	41	3,72

The above figures do not represent the whole of the capital invested in joint stock companies working in India. First, there is the debenture capital raised by several companies and its amount is not inconsiderable. But more important than that is the capital of companies incorporated outside India, chiefly with sterling capital, but carrying on work in this country. According to available information, there were, at the end of 1926–27, no less than 856 such companies with £ 581 million as paid up capital and £ 124 million as debentures. Of course, in the case of most of the banking, insurance, navigation and trading companies only a portion of their capital is actually invested in India. It is worth noticing, however, that Railways and tramways have an investment of foreign capital to the tune of £ 32 million, chemicals and allied trades, £ 22 million, iron, steel and shipbuilding, £ 47 million, tea £ 26 million and petroleum £ 17 million. These alone make a total of £144 million, which is a little less than ⅔ rds the total of the rupee capital invested in Indian joint stock companies, and are an illustration of the predominance of British capital in Indian industries.

81 Organising Enterprise:—Large-scale industry of the western style is an exotic in India and is becoming slowly acclimatised. It need not, therefore, be stated that the introduction and success of the factory system in this country are the outcome of European initiative, enterprise and managing capacity. British industrialists had a big start in this field. They came armed with the necessary capital and experience and received every encouragement. Except in the case of the cotton mills, Indians simply looked on with astonishment and admiration while foreign economic enterprise steadily expanded and occupied the field of the planting, mining, textile and engineering industries. When the results of scientific research and manufacturing development in England "began to reach India in the shape of machine-made imports, the movement had passed beyond the stage where imitation might have been easy and when the gradual evolution which had taken place in England could be readily imitated in India."[1] The policy of Government was dominated by the doctrine of *laissez faire,* Indians had no opportunities of gaining experience and no effort was made

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1 **Indian Industrial Commission's Report.**

to impart technical and industrial education. Trained supervisors were imported from England to look after the Indian workers in factories started and managed by Europeans. The industrial and trading classes in the country, continued, for years, to move in the old social and business grooves; those who received western education were fitted to become clerks, administrators, scholars and professional men; and it was only the prolonged contact with and imitation of European economic enterprise which brought forth and developed the natural intelligence and shrewdness of the country's business people. The modern industrial movement consequently started in the Presidency towns where Indian traders were associated with Europeans engaged in commerce and banking; and industries came to be based on the profits and experience earned in foreign trade. If it is, therefore, to become broad-based, stable and vigorous, there is need in India not only of skilled artisans, trained mechanics and capable foremen, but of enterprising organizers and managers. They will often rise, and must be given opportunities to rise, from the lower ranks, but general education and special training designed to turn out such persons, will also be necessary.

An industry or trade started by an enterprising man is bequeathed by him to his sons who will conduct it in the beaten path. Several concerns of the old style are found in India, thus going on from generation to generation in the same families. Customary methods are adhered to and a business will go on successfully for an indefinite period of time unless it becomes absolutely out-of-date or is ruined by the utter incapacity or fraud of the managers. The children and the relatives of a successful business man find easy opportunities of mounting the higher rungs of the industrial ladder which are denied to less favoured people, who are the majority.[1] In western countries where modern industrialism has an undisputed sway, accumulation of wealth in a few hands has given rise to a class division often as rigid as that of the Indian castes. The working and other classes rarely get opportunities to rise in the economic and social scale, and capital, though it is becoming democratised, is

1 "The son of a man already established in business starts with so many advantages that we might expect business men even to constitute a sort of caste dividing out among their sons the chief posts of command and founding hereditary dynasties, which ruled certain branches of trade for many generations together. But it is not so"—Marshall: Economics of Industry.

still the exclusive possession of the few, because to be employed in industry, it requires certain facilities which are not easily available. But a man from the middle or the lower middle class with neither influence nor capital but having plenty of brains and grit, can rise in the favour of the employer and get to the top of the tree. In India, trades and industries have become almost hereditary in families and are distributed among castes and communities. The Parsees, the Marwaris, the Banias, the Chetties and the Khojas who occupy a prominent position in industrial and commercial life, illustrate the truth of this remark. The majority of mill-owners, it is said, do not prefer to send their sons and relatives to educational institutions, literary or otherwise, as they do not like them to work with the boys of the common people and it is the general impression that nearly all the students in the technical colleges belong to families of very moderate means and that very few of them, if any, appear to come from those of wealthy manufacturers, whose sons should be training themselves to be officers in the industrial army.[1]

What happens in the case of the sons[2] of a wealthy business man is that living in an atmosphere which is not favourable to the growth of the habits of initiative, patience and unceasing labour they care more for social honours and easy living. The business machine goes on working by the initial force which sets it in motion and may be handed over to others possessed of the necessary energy. Business capacity and enterprise are not a natural monopoly of communities and families ; and the system of caste can not ensure transmission of these qualities. The environments in which people live, indeed have great influence upon their careers though a few men of genius exhibit capacity to bend them to their advantage and to conquer difficulties with perseverance. The middle class from which educated men joining the professions and Government service are drawn, find it difficult to get admission to business

1 "How are our Indian capitalists educating their boys ? Wealth is a stewardship, and the accumulation of great fortunes in individual hands can only be excused on the ground of important services rendered to the country by those holding them."—Report of Eighth Industrial Conference, page 414.

2 "At all events if they were born after he became rich, and in any case his grandchildren, are perhaps left a good deal to the care of domestic servants who are not of the same strong fibre as the parents by whose influence he was educated. And whilch is highest ambition was probably success in business, they are likely to be at least equally anxious for social distinction."—Marshall.

ranks. Economic pressure is, however, bound to loosen the fetters of class and caste bias which impedes progress, and these social dispositions and prejudices are already showing a degree of adaptability which was least suspected in them. While, therefore, the extended provision of technical education for the creation of a class of trained operatives is necessary, and it is recognized that it is by dint of character and of perseverance that men must and do rise to higher rungs of the industrial ladder, special stress is laid upon the necessity of opening business careers to young men of education, ambition and capacity, as it is believed that 'the most important factors in the increased production of national wealth would, in the case of India at least, at present, be the leaders, directors and supervisors of industries.' It is stated that it is the skill, capacity and training of generals and captains which determine victories more than the bravery and steadiness of the rank and file of the army.[1] In America and other countries highly educated University men enter business and are found to turn out eminently successful. In Germany special provision is made for the training of organizers and managers of industries. Under a suitable system of education there is no reason why it should not be so in this country also.

82. Training and Experience:—Successful organization of industries in these times of severe world-wide competition postulates the possession of certain physical, mental and moral qualities. The ability to contribute capital will not, by itself, make a business man. Many of the Indian industrialists of to-day, are hard-headed, astute and keen-witted men whose financial resources have acquired for them a high status in business and a succession of profits. Several of these men are, however, more financiers than industrialists,[2] and it is

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1 See Reports of the Indian Industrial Conference.

2 The following comment of a shrewd and frank observer on the working of the cotton textile industry are worth noting: "...during the seventy-three years of the existance of the textile industry, very few patents have been taken out in India, very little advancement either technical or on the business side has been made on local initiative and every improvement, which has come on the scene in Europe has been imported at necessarily a very heavy cost and many errors have been made in connection with the introduction of improvements":—*Mirror of Investment.*

but slowly that a race of enterprising and capable organizers is rising. Many put their money into industries but do not and can not control them. Their management of industries is consequently often weak and inefficient. European-owned concerns have an advantage over them in this respect. In the mining, engineering, tea, jute and shipping industries which are predominantly in the hands of the British people, the organisers are men who have had practical experience of those industries in the United Kingdom and elsewhere, who have a broad economic outlook and who are in touch with the latest technical and scientific movements in the west. They can command the services of the best experts and can handle intelligently problems concerning raw materials, fuel, power and markets so as to be able to meet competition and to increase the efficiency of the industries under their control. The development of Indian industries will be ensured only if Indians obtain the necessary equipment and if those who command capital appreciate its importance. Indications are not wanting to show that there is a growing realization of the existence of serious drawbacks in this connection in India and of the sore need of improvement in the situation. A visit to factories in Europe and America and training in science and technology in institutions there have been proved to be eminently useful in the initiation, expansion and conduct of industries here. As these latter develop, the number of experienced and trained men will naturally increase. Industrial efficiency is promoted by the economical use of raw materials, machinery and labour and the adoption of a cheap system of sales. Maintenance of strict discipline and supervision in the works and of a system of clear cost accounting goes a long way in the same direction. In European-owned factories in India the whole of the clerical work is done by Indians but the foremen and supervisors are non-Indians. Of the 26¾ lakhs of persons engaged in organized industries in the country, 123 thousand belong to the directing, supervisory and clerical staff. There are altogether 14,863 managers of whom less than a quarter are Europeans or Anglo-Indians.

While tea gardens in Assam and coffee and rubber plantations in south India and collieries, iron and steel works, engineering workshops and jute and paper mills in Bengal and the works at Jamshedpur, have a predominant European staff of foremen, supervisors and managers, only about one-tenth of the cotton mills in Bombay have

European managers. In the jute mills[1] there are 735 Europeans as against 527 Indians in the supervising and technical staff and in the iron foundries the proportion is 135 Europeans to 103 Indians. In the petroleum refineries of Burma, the supervising staff consists of 503 Europeans and 54 Indians. "In the 345 cotton spinning and weaving mills of Bombay, with their large staff of over 2,53,000 workers, the number of Europeans and Anglo-Indians employed is only 244 or less than 1 to 1,000 workers, while the jute mills of Bengal employ a proportion of one European or Anglo-Indian in about 300 employes, the collieries one in about 260 and the iron foundries one in less than 100 persons".[2] Capitalists and organizers are inclined to favour the employment of men to whom they feel drawn by family, social, communal and caste considerations. They know and think they can trust these men better, but it can not be said that this policy does not lead to jobbery and makes for economy and efficiency in all cases. Imported labour has to be employed in the case of processes and industries which are new to Indians. Americans had to import British labour, for many years, for their steel and tinplate industries; now they can do without it. The same thing must happen in India, and it would be wasteful to employ a costly foreign agency when less expensive indigenous labour can be substituted for it. The latest census report states that during the inter-censal decade the numbers of the superior staff engaged in industries with 20 and more employes, rose by 61 per cent.; the increase being specially marked in the more technical industries such as textiles, collieries and metal workshops. The following table taken from the report is instructive:—

Superior Staff		Europeans and Anglo-Indians	Indians
Managers	...	3,498	11,365
Supervising and Technical Staff	...	9,147	37,553
Clerical Staff	...	2,026	59,655
Skilled Workmen	...	4,427	7,79,533

1 "Unlike the Indian capitalists of Bombay who own verily all the cotton mills there and, what is more, staff them with Indians, the Bengalees do not own a single jute mill in Calcutta, nor are they to be found on the supervising staffs. Dundee still provides the skilled labour and with the exception of two recent Marwari companies, the industry is in the hands of Britishers, Scotchmen for the most part. Yet it is notorious that 60 per cent, of the share capital is held by Indians."—*Mirror of Investment.*

2 Census Report, 1921.

83. Vitality of Cottage Industries:—Advantages of the concentration of capital and labour, of the use of labour-saving machinery and of mass production, are undeniable, and India can not wholly refuse to avail herself of them. Apart from the consideration that evils of industrialism may be counteracted and obviated by timely remedial measures and precautions, the people of this country can not help treading the path of economic development opened by the inventions of science. It can not be denied that India has profited by the experience of the west, as recent legislation regarding the protection of the interests of labour will testify, regarding large-scale production with the least possible cost on the lines of progressive nations. But the day for the small industry is not entirely gone. On the contrary, certain peculiar conditions of modern times themselves are favourable to their continuance and growth. Popular taste likewise requires certain handmade goods, and thus varieties of headwear, dhotics and saries made by the handloom weavers have not been displaced by modern factories. The metal worker, the shoemaker, the goldsmith, the tailor, the confectioner and other craftsmen fall into the same category. Proximity of the market and of the customer combined with the simplicity of the consumer's wants, gives the cottage industry an advantage over the factory, and the former is now-a-days in a position to benefit by mechanical and other improvements which are being made every day. The artisan in the West can work in his own home with the help of cheap motive power and machine tools, and there is no reason why the Indian craftsman should not adopt his methods.[1]

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1 "The carpenter, if he is furnished with a very cheap motive power which is necessary to set circular saws or other machine tools in motion will be able to work in his house as well as a great manufacturer. In this way he will be able to utilise his small group of machines in a variety of ways, until he will begin to acquire a perfect command over his work which he could not have been able to attain if he had been a workman in a great factory. In spite of the advantages on the side of the big manufacturers, the small manufacturer will be in a position to compete with them. He will find an energetic support in the collaboration of the members of his family and in the moral element which will be the consequence of the work in his proper home. He will form a number of assistants and apprentices, or in fine, a complete industrial organization quite analogous to that of the ancient professions but differing from it only in the introduction of the machines. The improvements of applied science can now supply him with the motive power at a very small cost. The modren developments of the use of electricity might now transmit power cheaply to the cottage of a small producer."—Report of the Eighth Industrial Conference, Page 122.

We have referred on a preceding page to possibilities of power in this country and to the hydro-electric schemes which are already in successful operation in Bombay, Mysore and elsewhere. If electrical energy generated by water power at different suitable centres in the country is transmitted over distances, many a home industry may be rehabilitated and placed on a sound footing. The hydro-electric schemes are calculated to serve a double purpose *viz*. to supply electric power and irrigate acres of land at the same time, and it is possible to combine two different types of mutually helpful industries in one and the same project.[1] If gas and electricity are now providing social amenities to urban workmen, it is but reasonable that the craftsman and the mechanic should be placed in a position to avail themselves of the motive power for productive purposes. The chief difficulty that is sure to stand in the way of this consummation is the dominating claim to the above advantages that will be effectively advanced by the urban users of electrical energy for traction, lighting, heating and for industrial purposes, and the only benefit mofussil industries will derive will be indirectly due to the economy of coal fuel in large industrial centres. Electricity is being thus used already in urban industries. The census of industries reveals the fact that of the establishments covered by it, one half use power of some kind, steam being used by over one-third of the total number. A rough idea of the distribution of power over different forms will be obtained from the following table which, however, does not claim accuracy :—

Number of Establishments using Power.

Kind of power	Number of establishments.
Steam ...	5,293
Oil ...	1,335
Water ...	85
Gas ...	165
Electricity ...	
(1) Generated on premises ...	420
(2) Supplied from without ...	717
Total ...	8,015

When it is borne in mind that power is being increasingly used in rural industries like rice mills, it will not be difficult to understand how it is quite practicable to maintain the smaller and

1 See Memorandum submitted to the Industrial Commission by Mr. R. B. Joyner.

the home industries in an improved form. The preservation of such occupations is an economic and a national necessity and is not dictated by mere sentiment, their remarkable vitality being, as it were, rooted in the nature of things. It will indeed be years before the use of power becomes common in cottage industries as it is bound to be confined to a few favoured localities. But even if no power can be used, suitable machines and processes can be introduced with a view to increase efficiency. It might have been expected that with more than a century's contact with the West, the indigenous cottage industries should have disappeared almost entirely from the field which was opened to the products of the modern factory, foreign and Indian. But the old industries survive with an astonishing tenacity and it would be a wrong policy to leave them to their fate in the struggle for existence on the principle of the survival of the fittest, as it would be unwise to refrain from effecting suitable improvements in them for fear of Westernizing Indian industries. At an all-India handloom weaving exhibition held a few years ago at Patna, an interesting feature of the discussions which took place, was "the absolute unanimity of opinion among the experts that handloom weaving, so far from being decadent, was capable of great expansion and development, not only as an artistic industry where its vitality is obvious, but on the side of mass production." It is to its output of coarse cloth that it owes its real importance as the second largest industry in India. Weaving is concerned with three important raw materials, cotton, wool and silk, the supply of which is abundant in India and the manufacture of which is an ancient industry in the country. But if it is to survive as a thriving industry, it must be well-organized—preferably on a co-operative basis—as the weaver's illiteracy, business incapacity and lack of capital are as great a handicap as his obsolete appliances.[1] Improved appliances, suited to Indian conditions, like the flyshuttle and the dobbie and the jacquard, are being introduced under the auspices of Government Departments[2], and the industry has received some stimulus from the popular movement in favour of *khaddar*.

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1 See Bombay Co-operative Quarterly, March, 1929.

2 The Industrial Commission, 1916, had taken a similar view of cottage industries and recommended that measures should be taken by Government and merchants to improve their position by providing suitable training for artisans, by affording financial help and by arranging for the marketing of their products. See Chapter XVII of the Report.

84. Process of Evolution:—Industrial organization in India, it will have now been realized, is in a state of transition and three different forms of it may be distinctly noticed: (1) the cottage or the home industry, (2) the small-scale industry using modern machines and tools and perhaps power also and (3) the western type of big factory engaged in mass production. Except what is produced for direct personal or family use, the output of all the three classes of industry must be a response to the demand of consumers, which is slowly changing in direction and quantity. Some entirely new wants are being met by the readjustment of the home form of industry or by the adoption of either of the two other forms. Caps, ready-made turbans, harmoniums, cutlery, shoes and boots and clothing of the European fashion, are instances of the first and paper, glass, soap, pottery, lamps, agricultural implements, cotton cloth, woollen blankets and jewellery are illustrations of the second and the third. The producer has to wait upon the tastes and the purchasing power of consumers and price, and therefore internal and external competition, is a powerful cause of the change in industrial organization. The displacement of the cottage industries and of autonomous workmen by factories and machinery, is going on apace in India, and the prospect of the patent evils of industrialism coming in the wake of the modern development of large concerns, has caused and rightly caused, no small anxiety to thinking people. The tendency towards large-scale production seems to be inevitable; foreign competition and growing needs of the people seem to require it. One has only to imagine what will happen to education, politics and progress if only hand-made paper is available to the printing, publishing and newspaper trades! But the decadence of the old arts and handicrafts, the vitiation of public taste, which imports of machine-made, cheap goods have caused, the degradation of the workmen to the position of unskilled wage-earners and the migration of the rural population to enervating mills, mines and factories and to the overcrowded and unhealthy cities, are evils associated with the factory system; and the question has been asked: 'Is Europe going to make Asia an East end?'

"Do not let us compete", the exhortation runs, "with Western nations by evolving for ourselves a factory system and a capitalist ownership of the means of production corresponding to theirs. Do not let us toil through all the wearisome stages of the industrial

revolution—destruction of the guilds, elimination of small workshops, the factory system, *laissez faire*, physical degradation, hideousness, trusts, the unemployed and unemployable and what may be to follow."[1] We are suggestively asked to consider if the true hope for Indian industry does not lie in some development of the caste system itself in the village and home industries of the past aided by such improvements as are needed e. g. the fly shuttle or the distribution of electric power. This is one of the most interesting and difficult problems relating to the economic evolution going on in India. Until a few years ago, this country was in the same industrial condition as England or France, about the middle of the eighteenth century and appears now to be marching in their foot steps.[2] If an Indian craftsman of the time of Ashoka or Kalidasa were to visit the scenes of his activities to-day, he would indeed be astonished at the sight of the electric tram cars, the telegraph wires and the gigantic machinery working in a factory, but he would probably not fail to recognize the familiar handloom, the wooden plough, the crude oil mill and the potter's wheel, the horse-drawn chariot and the bullock cart of his own day. The present state of economic change is reflected in the fact that we see certain spots in the country completely westernized; in several others, a juxta-position of the Western and the Eastern, the new and the old; and in most parts of the interior, the ancient forms in their pristine integrity. The incongruity of bullock carts laboriously threading their way through the crowded streets of Bombay and Calcutta, with their small burden of a few bales or bags, while motor lorries and electric tram cars whizzed past them every moment, has struck many observers; but it only typifies the curious evolution that is going on all over the land. The country roads now present similar scenes every day. The most primitive forms of

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1 A. K. Coomaraswami : *Indian Idealism.*

2 " In the time of Louis XVI, when inventors were already becoming somewhat numerous, especially in England, the people of Western Europe for the most part continued to till their fields, weave their cloth, and saw and plane their boards by hand, much as the ancient Egyptians had done. Merchandise was still transported in slow, lumbering carts and letters were as long in passing from London to Rome as in the reign of Constantine. Could a peasant, a smith, or a weaver of the age of Cæsar Augustus have visited France or England eighteen hundred years later, he would have recognized the familiar flail, forge, and handloom of his own day.'—*Robinson and Beard* : The Development of Modern Europe, Vol. II, Chapter XVIII.

industry and trade may be witnessed side by side with the most up-to-date factories, machines and commercial methods.

85. Division of Labour :—It is essential to bear in mind that consumption is the sole spring of wealth-production and determines how and where the latter shall take place. Demand fixes the volume, the variety, the location and the method of production which thus becomes specialized, socially, geographically and qualitatively. The exchange of goods between the countryside and the towns, of agricultural produce and manufactures, is well-known. Rural and urban areas develop industries on the basis of division of labour within, as well as between those areas, effective demand and the means of transport being the chief regulating factors. Industrial specialization has been identified in India with caste and communal divisions; and production has been assigned to particular groups and is intended for definite localities and for specific classes of consumers. But with the introduction of improved means of transport and with increasing change in the tastes of consumers, the old basis of the division of labour has been shifted. The cultivator of raw materials and food grains produces to satisfy the demand of consumers in distant markets in India and in foreign countries and the Indian demand for manufactured goods is met by producers working hundreds or thousands of miles away from the local markets. A geographical division of labour and localization of industries of a sort, have, however, always existed in India so far as that has been allowed by the self-sufficing character of provinces and districts created by distances and difficulties of transport. Climatic, political and social causes brought together certain classes of workers in silk, wool, metals and gold thread; and industries connected with shawls, carpets, vessels &c. became localized. Dacca, Benares, Delhi, Amritsar, Shrinagar, Murshidabad, Ahmedabad, Masulipatam and Madura thus became great centres of industry. Each province has had a similar industrial localisation of its own.

But that is nothing as compared to what amounts to a revolution in industrial organization which is taking place all over the country. The fact brought out in the latest census report that the larger sized towns, the centres of trade and of the modern type of industries, are growing in population at the cost of rural areas and the smaller towns, is significant in this connection. It has been already shown that *in the manufacture of cotton cloth, pottery,*

glass, paper, sugar, metal utensils, cutlery, vegetable oils, leather goods, woollens, silks, shawls, carpets and other articles, we have, at the present moment, a three-fold system, the modern factory and the small sized business working side by side with the domestic industry but trying to drive the latter out of existence. There is little scope under the old organization for any extensive technical division of labour and specialization, and the integration of industry on modern lines is not possible. But as soon as machinrey is employed, even on a small scale, such opportunity is offered and division of labours spreads. The division of labour that ordinarily exists, is the caste or subcaste distribution of trades and occupations. Where new industries are started, they are of the modern type, e. g. manufacture of steel, soap, candles, oil, glass, iron implements, matches &c, and there we observe the tendency towards division and integration e. g. manufacture of by-products and bringing under one management allied industries and trades. Waste products will thus be turned to account and this is rendered practicable by the large size of the undertakings. A knowledge of industrial chemistry and mechanical and electrical engineering, is proving eminently useful in the establishment and progress of such industries; and opportunities are being afforded to those possessing scientific and technological training to organize wealth-production out of India's raw and waste materials. Nothing is more beneficent, economically speaking, than the imparting of utility to refuse, by-products of industry and 'superfluous' matter.

The steady displacement of the hand industries by machinery driven by power, and the substitution of wage-earning operatives in the place of the domestic labour of autonomous workers, is the order of the day. Industrial development, therefore, chiefly means, for the time, the starting of mills and factories with large amounts of capital. Though, therefore, the individualistic and partnership forms of production largely prevail in the country, the joint-stock concerns are tending to multiply. But the consciousness is growing that wherever possible, the small industries should be preserved and improved, and that special efforts ought to be made to direct industrial evolution into suitable channels. The principal difficulty of the position lies in this that some of the people who have capital and business capacity, like to play for big stakes and others will not risk their money in industrial ventures. Craftsmen of the old order are shiftless and

ignorant and can not save and improve their inherited callings. Persons of the educated middle class have little liking for small industries and it is not easy for them to get admission to business careers. This state of things is slowly changing owing to economic pressure which is pulling down class and caste barriers and creating an entirely new order in trade and industries. The maintenance or revival of the old caste and village organizations, therefore, does not appear to be practicable, and a readjustment of the systems is suggested as a remedy by the very facts of the situation.

86. **Caste**:—The caste organization has been already referred to as an institution which is intimately connected with the economic life of the people. The social and the economic functions of caste came to be inextricably bound together so that the regulation of industry was as much its function as the supervision of the conduct of members. But the economic aspect of caste has always tended to be distinguished from the purely social aspect, and the former came to be identified more and more with the guild. In the absence of the regular guild, however, the caste organization dominates the whole life of the trader and the artisan. The panchayat of each caste controls the dealings of members with one another in certain defined particulars and discusses and decides various social and domestic questions and inflicts punishments upon offenders. Rules of the caste with regard to personal conduct are made binding upon individual members, and penalties are laid down for breaches of regulations. The panchayats sometimes also seek to regulate the industrial methods pertaining to the occupations of the castes, and offences against the community tending to lower its corporate character are solemnly considered and punished.[1] So far as the organization of production is concerned, the members of a caste have rigidly to follow the lines laid down by the leaders of the community for their guidance. The caste was not, of course, a joint stock company and did not produce wealth in a corporate capacity or in its character as a social group or community. Under it, as under the system of

1 "The Sunars of Hushangabad have a guild panchayat on the night before the Dashara, when they hold a feast, and are said to take an oath that none of them on pain of outcasting will disclose the amount of the alloy, which a fellow has mixed with the precious metals. The *Koshtis of Chanda* in 1907 proscribed a certain cloth and yar seller of the city who had offended some of their number and resolved to outcaste any Koshti who dealt with him."—Census Report, 1911.

craft guilds in Europe, the craftsmen were autonomous workers, with their journeymen and apprentices. But it had rules and established customs with regard to the details of the trade its members pursued, in matters of the raw material, wages, prices and quality and sale of manufactures; and the regulations were quietly submitted to because their infringement meant fines and excommunication. The organization of caste had its serious drawbacks as well as its advantages.[1]

The very causes that wrought the disorganization and decay of the craft guilds in England are in operation in India to-day, and a readjustment of economic and social forces is steadily but surely going on. But trade unions which are just struggling into existence can not be compared with the old guilds and are not fit substitutes for the old caste institution, and things are, for the time being, in a flux. Manufacturers and merchants have their organizations designed to safeguard and promote their common interests, and they copy the programme and the methods of the employers' and traders' associations in the West. The shroffs and Mahajans of the old type are thus bound together by ties of fellow feeling and commercial co-operation and carry on business successfully without much outside help. But artisans and workmen are disorganised and helpless where the hold of the castes has loosened,—and it is loosening on every hand—and where trade unions have not yet acquired strength and authority. Under the modern factory system now spreading in the country, economic interest and not caste is the cementing principle of association in the case both of employers and workmen. Associations of manufacturers like those of the

1 "There, is, therefore, a plasticity as well as rigidity in caste. Its plasticity has enabled caste to adapt itself to widely separated stages of social progress and to incorporate the various ethnical elements which make the Indian people. Its rigidity has given strength and permanence to the corporate body thus formed. Hinduism is internally loosely coherent but it has greater power of resistance to external pressure. Each caste is to some extent a trade guild, a mutual assurance society and a religious sect. As a trade union it insists on the proper training of the youth of its crafts, regulates the wages of its members, deals with trade delinquents, supplies courts of arbitration, and promotes good fellowship by social gatherings. Fabrics of medieval India and the chief local industries of our own day, were developed under the supervision of caste or trade guilds of this sort. Such guilds may still be found in many parts of India but not always with the same complete development."—W. W. Hunter: Indian Empire.

millowners of Bombay and Ahmedabad and colliery proprietors in Bengal have as their members persons of all communities and castes, Hindus, Muslims, Parsees and Europeans and they take concerted action in defence of their special interests.

India appears to have had village panchayats as distinguished from caste panchayats and corresponding to the merchant guilds of medieval Europe. The function of these bodies consisted in deciding on all social, religious, economic and administrative questions affecting the village as a whole. Most of these organizations, whose lineaments can be clearly seen in inscriptions of the middle ages found in southern India and whose share in public life was a remarkable feature of the administration of the country, have now disappeared and we have survivals of only a few of them in certain parts of the country. But the vitality of the caste panchayats is greater; and the less advanced a community, the stronger is the hold of that authority on its members. There is but a slight analogy between the Indian caste and the English craft guild.[1] In the former, social and religious functions predominate; and in the latter, it is the regulation of industry which characterises the organization.

87. Ancient Indian Guilds :—The craft and merchant guilds of India have a long history and traces of them have been discovered even in the Vedas which take us to a time two thousand years before the Christian era. From Budhist literature[2] we find that various crafts were organised in guilds with their councils and executive officers; and as many as eighteen of these are mentioned. Hindu literarure abounds in references to guilds, their constitution, rules and functions, and no doubt is left about the fact that they occupied an important place in the social economy and that they were in a flourishing condition. The head (shreshthi) of the Guild (Shreni or Sangha or Gana) was a man of high social status and was held in great esteem by the king as well as by the people. In the time of the Budhist Jatakas, arts and crafts had already become hereditary. They had likewise become localised, and streets in towns, and in many cases, whole villages were inhabited by one class of artisans.[3] This two-fold combination viz. the restriction of

1 Sir Herbert Risley: The People of India, page 259.

2 Rhys Davids: Budhist India.

3 R. C. Majumdar: 'Corporate Life in Ancient India'; Hopkins: 'India, old and New'.

an industry to a particular caste and its limitation to a certain locality may be seen even at the present day in India.

Kautilya's Arthashastra and the Dharmashastras of Manu, Gautama, &c. show a further development of the guilds of merchants and artisans, and we find 'cultivators, traders, herdsmen, money-lenders and artisans' authorised to frame rules for their respective classes. The king is enjoined to give his decisions in cases of dispute, according to the rules of the guilds which are recognized. Manu[1] and other law-givers speak of the laws of castes, villages and guilds, thus showing that guild organizations were coming to be distinguished from castes and were even developing their own customs regarding the production and disposal of wealth. It appears, therefore, that at least in some cases the caste was an endogamous group and did not necessarily possess a community of economic functions. The guilds held property in their corporate capacity and also as trustees. Inscriptions found in the different parts of the country and belonging to early centuries of the Christian era, show clearly what was the position of artisans' and traders' guilds which served as bankers and trustees. The guilds had regular rules about apprentices, and caste does not appear to have been a rigid bar to the admission of pupils to different trades. The restrictive influence of caste became stronger with the lapse of time, and that institution has continued its hold on Hindu society while the guilds have decayed and disappeared except in a few parts of the country.

88. Guilds and Castes:—The English craft guild was extremely exclusive and exercised a vigorous control over membership, apprenticeship and the general practice of its particular craft. But it is not to be supposed that it had no religious and social side of its own[2] and

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1 Manava Dharmashastra, VIII, 41 ; Yadnavalkya, I, 361.

जातिजानपदान्धर्माञ्छ्रेणी धर्मांश्च धर्मवित्
समीक्ष्य कुलधर्मांश्च स्वधर्मंप्रतिपादयेत् ॥—Manu.

2 'The religious side of the guilds has not so far come into much prominence but most of them had this side to their activities, and indeed with some, religious and social duties had formed the nucleus round which the other powers had gathered. Pageants and processions on certain saints' days and formal attendance at worship, were part of most medieval associations and more common still were alms and charities and prayers and masses for the souls of dead brethren.'—Townshend Warner: Landmarks in English Industrial History.

herein we trace a similarity between it and the Indian caste, though the English guild never made its occupation hereditary. That a person must be born in a caste to be entitled to be its member, is a peculiarity of the Indian caste. And even in India we see instances of absorption of castes and the creation of new ones or of sub-castes. The idea of the inherent social superiority and inferiority of certain occupations and classes and of the inheritable character of the qualities and functions of these classes, did not strike root in the European soil while in India the distinction of *Varnas* based upon qualities and actions alone, faded from the popular mind, and social divisions steadily multiplied as they became more and more rigid. Some castes do correspond to crafts, but in the case of several there is no such indentity.[1] A caste is divided into a number of sub-castes clearly marked off from one another, and the latter are distinguished by the peculiar economic functions which they perform. The economic cleavage here is as wide as the social. Artisans' guilds are numerous even at this date in Gujarat and Kathiawad and their number in a town ranges between 30 and 150. The Mahajan is a guild of bankers, traders, brokers &c. while the Panch is a guild of artisans. Ahmedabad is to-day the centre of the guild system which extends into Rajputana. Elsewhere the guilds disappeared long ago and even in Gujarat, their power is fast declining.[2]

The regulative functions of castes relating to matters economic, have steadily receded into the background and their members have secured increasing freedom to take to any trade they may find suitable. To-day, caste and occupation are no longer convertible terms; and a trade is found followed by people of different castes; and as regards non-Hindus, these social restrictions are non-existent among them though religious and social prejudices impose certain limitations even in their case. Thus weavers are found among different castes and creeds, and in the Punjab, "in the eastern districts the Julahas constitute a real caste, but further westwards distinctions of race tend

1 "The same caste may embrace several crafts, and as a rule, Mahammadans and Hindus engage in the same trade, each working for his own community. Sometimes they take recognizable sections of a craft and work separately. At other times they may be found in the same workshop and Hindus now often employ Mahammadan craftsmen whereas formerly the Hindus were the labourers and the Mahammadans the employers."—Imperial Gazetteer of India, Vol. III.

2 For an interesting account of Indian guilds see Hopkins' "India, Old and New," 176.

to disappear. Khokhars and Pathans, Mirasis and Rajputs, and even needy Sayyads are found plying the weaver's shuttle for their livelihood in Jhang and Multan."[1] Changing popular tastes, competition of foreign and indigenous machine-made goods, the increasing use of machinery and of improved tools and the growth of individual liberty have disorganised and will tend more and more to dissolve this industrial organization based upon the principle of sect or caste. Before the advent of machinery and the spread of general and technical education, (as also the changes which rapidly took place as a consequence, in social usages and ideas), had obliterated the distinctions among the different classes of work and of workers, even in a country like England, as Mill observes, the barriers which separated one industry from another were almost insuperable.[2]

A similar process is clearly visible in India, and enterprising men are rising to a higher status in economic organization independently of all social distinction. Not only will Brahmins become mechanics, foremen, carpenters, artisans, petty shop-keepers, contractors and engineers, but people of the socially lower classes also are being enabled to organize industries and command labour and thus to override the limitations set by caste. The movement is, therefore perpendicular and likewise horizontal. A noticeable tendency of recent years has been the growth of communal and caste pride which resents the imputation of social inferiority and seeks to elevate the social status of hereditary occupations. The sectional consolidation which is the object of this movement, has the beneficial effect of spreading education and efficiency among the members of the various castes and sub-castes, though at the same time, it diverts the ambition of people from economic to clerical, literary and professional pursuits in certain cases. The advantages incidental to caste and guild organization are no longer serviceable to persons who aspire to rise in the social scale or to improve their economic condition. The regulations and restrictions of caste are, therefore, found to be

1 Latiffi: 'The Industrial Punjab.'

2 "So complete, indeed, has hitherto been the separation, so strongly marked the line of demarcation, between the different grades of labourers, as to be almost equivalent to an hereditary distinction of caste, each employment being chiefly recruited from the children of those already employed in it or in employments of the same rank with it in social estimation or from the children of persons who, if originally of a lower rank, have succeeded in raising themselves by their exertions."—Principles.

impediments rather than helps; and individualistic tendencies noticeable among members of castes will prove destructive to those organizations. The levelling and democratic process is thus economically beneficial. The economic side of man rises superior to communal and religious differences, and economic necessity has proved a great leveller. Large capital knows no distinction of caste and creed, and orthodox Hindus are found jostling with Moslems, Europeans and Parsees on the stock exchange and rubbing shoulders with them on the managing boards of mills, factories and banks. There are some thinkers in the West who believe that the guild idea deserves to be revived at this moment when the conflict between employers and operatives has become very bitter on account of the control of industry having passed out of the hands of the expert workers into those of a narrow class of capitalists. They wish to revert to the spirit of the old guild, to times when man was "mainly a craftsman and a democrat who had not wasted many hours on politicians and governors."[1] The suggestion has inspired some thinkers in India with the hope that the revival of the castes and village organization may put back the tide of capitalism which is seeking to engulf society in this country. Our view about the proposal will be gathered from the discussion of the subject of industrial organization carried on in this chapter.

89. Farming.—As will be shown in the next chapter, the economic status of a community is measured by the nature of the living and the welfare it secures through its labour. The natural conditions in the midst of which man works and the importance of the efficiency of labour with which he can exploit them with the aid of tools and machinery, have been discussed in the preceding chapters. In considering the different forms of industrial organization in India, attention must now be chiefly directed to the manner in which they contribute to production and the ways in which their contribution may be increased. The solution of the whole problem of Indian poverty rests upon the favourable turn that we may succeed in giving to the machinery of the organization of wealth-production. (1) To make the best use of the nation's natural resources, (2) to improve the productivity of labour, (3) prevention of the waste of labour power and of raw materials, (4) to make capital easily accessible and cheap and thus (5) to lower the costs of production and (6) to make savings and decent incomes possible to steadily growing

1. G. R. Sterling Taylor: 'The Guild State.'

numbers,—this is the many-sided but all-important task that has to be taken in hand every where. Scientific research, education, banking facilities, industrial protection and similar other measures of national policy are calculated to help in the efficient organization of industrial enterprise; and even the charkha movement, like co-operation, has the same end in view. How to bring about the most intelligent, economical and effective use of our resources, is the vital question to be tackled.

The organization of production in India has to be studied in different aspects which simultaneously present themselves to the view and range between a poor peasant's simple cultivation of a patch of land or the occasional land tillage, combined whith other primitive occupations, of the backward tribes that inhabit the hills and the jungles, on the one side, and on the other, the manufacture of the heaviest or the finest articles in a factory of the most modern type by up-to-date methods and on an enormous scale. Except in the case of a few big land-holdings, agriculture is, for the most part, in the hands of small men. Farming on a large scale is quite exceptional in India. "In the rayatwari areas of Madras, for example, the average size of a holding does not exceed eight cultivated acres while in the more thickly populated areas of Bihar, under the Zamindari system, the tenant holding averages less than half an acre." In Bengal, the original home of the big Zamindars and of the permanent settlement, the $24\frac{1}{2}$ million acres of land under cultivation, are divided among 11 million actual workers in cultivation, which means barely $2\frac{1}{4}$ acres per worker. The organization of the agricultural industry, the basis of the country's economic prosperity, is closely bound up with the different systems of land tenure that prevail in the provinces. Economists have discussed the comparative merits of the systems of land holding such as peasant proprietorship and tenancy and based their preference for one form or another on the consideration of the efficient organization of production and also the resultant social well-being. In northern India generally, where the landlord class predominates, land is actually cultivated by small tenants in whose hands, for lack of capital and of sufficiently large holdings, farming can not be very productive. In southern India, holders of one to five acres of land predominate. We shall show in the chapter on landlords and tenants how a veritable agrarian revolution in relation to property rights in land, has accompained every political upheaval in India; and in this

change, the organization and working of the agricultural industry have been powerfully influenced. There is a constant transfer of land going on, and this some times leads to a more efficient management of agriculture at the hands of capable owners. Generally, the landlords do not care for improvements and become mere rent-receivers. And where old landowning families have declined, in the vicissitudes of fortune to the status of tenants of one class or another and are rooted to the soil or work on leased land, there is little scope for progressive, enlightened and profitable farming.

A few intelligent and enterprising landlords are indeed found taking a keen interest in their business, organizing their farming along systematic and scientific lines; and sugarcane and vegetable cultivation and fruit gardening, for instance, have proved encouragingly remunerative. These are models which others may beneficially follow. There is a complaint, however, that while a small cultivator loses heart when his labour does not bring in an income, his big brother begins to play the absentee landlord the moment prosperity comes to him. Agricultural associations and co-operative societies may be expected to do something for the small cultivator by teaching him improved methods and helping him in other ways to make his farming more profitable. He may borrow capital or purchase seed from his society and carry out improvements suggested to him by demonstrations given by the officers of the Agricultural Departments. Farming has, however, to be carried on as a business and must be an economic proposition, the land-holder organizing production in an intelligent and efficient manner. The productivity of the soil in India has to be increased by the liberal application of capital and labour, and the cultivator must have the enterprise and the necessary means at his disposal to do this. The peasant proprietor or the tenant in India is, as a rule, too poor and ignorant[1] to carry on his industry with sufficient profit to himself and to the country. There is so much sub-infeudation and subletting of lands that the rents

1 "In England the farmer is generally a person of some education and substance, farming large areas and capable of applying the results of his reading. The great mass of the agriculturists of India are small holders and the standard of education among them is, as a rule, low...... ..I am well aware that in every province in India there are not a few highly educated and intelligent landlords and farmers; but as a rule the cultivator of India is a small holder. This obviously, complicates the problem."—Mr. Mackenna: Paper read before Royal Society of Arts.

taken by middlemen leave little profit and incentive to the actual cultivator. Few of our cultivators are, therefore, farmers in the real sense of the word, and in their hands agriculture is not a business. With many it is a subsidiary occupation—a parasitic industry which enables them to earn wages, probably for a few months in the year. Spread of education and improvement of credit may be expected to improve these conditions and to lead to a better organization of agriculture and with it of dairy farming, cattle breeding and other allied industries. Intelligent landlords must take genuine interest in the improvement of agriculture and the industries subsidiary and allied to it and set an example to others. The responsibility of the State in this matter, is enormous, and individual initiative and effort can not alone be trusted to bring about any appreciable reform.

90. Subdivision of Holdings:—The greatest difficulty in the way of improvement is that the bulk of the agricultural holdings, in Jamindari as well as Rayatwari areas, are not economic units. Here is the premier industry of India which supports 71 per cent. of the population and yet it is not being run as a business proposition! Mr. Keatinge defines an economic holding as one "which allows a man a chance of producing sufficient to support himself and his family in reasonable comfort after paying his necessary expenses." In the Deccan an ideal economic holding would, according to him, "consist of (say) forty or fifty acres of fair land in one block with at least one good irrigation well and a house situated on the holding. The desirable area would vary greatly in different parts according to circumstances."[1] The average holding is very small, often ridiculously small, and is split up into several plots situated at a distance from one another and consequently it is absolutely uneconomic from the point of view of the cultivator and involves wasteful farming from the point of view of national productivity. The cultivator with such a ho ding can not be expected to develop or improve his property and must live in depressing circumstances. He must eke out a living by taking to other occupations and working as a wage-earner either in his own village or elsewhere to supplement his income. Argriculture proves wasteful in these circumstances and the community is not able to make the most of its natural advantages. Growth of population and continued partitions of landed property have resulted in

minute subdivisions and dispersion of lands and the effects of this tendency upon the community are cumulative.[1] The evil is thus two-fold. Lands are not only split into small fragments, but these latter, though belonging to the same owners, are scattered in distant places so that their cultivation entails disproportionately large expenditure of time, energy and money. A holding may be sufficiently large but may be cultivated in separate parts, and on the other hand, one farmer may take up scattered pieces and manage them together. He may be part-owner and part-tenant in as much as he combines land belonging to him with fields taken on temporary lease. The evil of fragmentation is not peculiar to one province or another or to the Jamindari or the rayatwari tenure. It is almost universal. In one village in the Punjab, for instance, it is found that 584 owners own 2,353 acres of land in 16,311 fields, the average being one-seventh of an acre. In Jullunder district, owing to successive partitions of holdings, shares in wells have also been divided so that a man may own a one-sixteenth of one well and one-eighth of another and so on. Such instances are common throughout the country.

In order that a business may prove remunerative, that is, the value of its product may leave a surplus after covering all costs, it must have a definite minimum size. It must utilise certain minimum units of the factors of production to the fullest extent and must control those factors in certain sizes and proportions. So far as land, the primary factor in farming is concerned, subdivided and fragmented holdings do not admit of this primary condition of profitable agriculture being satisfied. Land, therefore, makes no contribution to the final product and leaves no surplus to the cultivator, and if the latter has to pay a contracted rent to a landlord, it cuts into his wages. As there are too many people on the land in India, the supply of labour is disproportionately large and agriculture is, in several cases, not a paying proposition and becomes a part-time occupation with many persons. A high rate of interest on capital borrowed, has a similar effect on the industry. Maintenance of the cultivator and his

1 "It is evident from this that in the last sixty or seventy years the character of the land holdings has altogether changed. In the pre-British days and in the early days of British rule, the holdings were usually of a fair size, most frequently more than nine or ten acres while individual holding of less than two acres were hardly known. Now the number of holdings is more than doubled and eighty-one per cent. of these holdings are under ten acres in size, while no less than sixty per cent. are less than five acres".—Dr. H. H. Mann: "Land and Labour in a Deccan Village."

family and interest on borrowed capital are fixed charges which leave no surplus in the shape of rent or profit. With intensive cultivation, e. g. in the raising of commercial crops and horticulture, however, land, in spite of the smallness of size, will yield a surplus because though the cost per acre is higher, the yield is larger in proportion.

Laws have been made in certain countries rendering possible the creation of impartible holdings of a particular size, and also prohibiting subdivision below a standard measure. Similar legislation is being attempted in India but so far no law has been actually passed. Increase of population and growing dependence on the agricultural industry are as much responsible for the evil of the extreme fragmentation of land as Hindu and Mahomedan laws of inheritances and the strong attachment of the people to their ancestral holdings. It is an irony of fate that the very legislative measures which have been taken by Government to protect the interests of the tenants in north and north-east India, have tended to chain the cultivator to an uneconomic holding; rendering him an uneconomic worker on the land and elsewhere.[1] Spread of education, chanage of public sentiment and a suitable modification of the existing laws of inheritance, are pointed out as remedies.[2] But they are not likely to be efficacious unless new industrial avenues are opened to the people and they find congenial work in other fields. Subdivision of holdings is bad, in all conscience; but where are the dispossessed people to go? That is the pertinent question asked by persons whose interests are at stake, when confronted with proposals of reform of the evil of subdivision; and the answer is not easy to give. The creation of impartible holdings

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1 "In Bengal the holdings have been so minutely subdivided that there is not enough work for the cultivators but on the other hand there is no other work to which they can turn their hand. The very rights which the cultivator has in his land and which it has been the object of the tenancy legislation to preserve to him, stand in the way of an adjustment between the supply and demand for labour in this Province."—Census Report 1921, Vol. I, page 245.

2 The exhausting nature of agriculture, the rapid growth of population and the minute subdivision of land were three important facts which arrested the attention of Mr. Caird, a member of the Famine Commission of 1880. Talking with the Co-Regent of Hyderabad on the question of the evil of the subdivision of land, he elicited the following significant remark—"It is the custom of the people to subdivide among the sons of the family and who can interfere with that?"—"India, the Land and the People."

will require a radical change in public opinion; and voluntary effort rather than legislative coercion will have to be depended on for a long time to come. In the meanwhile, consolidation of scattered holdings with the consent of the owners may be tried with a fair prospect of success. The influence of co-operation is being brought to bear upon the solution of this problem, and a number of 'co-operative consolidation of holdings societies' have been started in the Punjab and a few elsewhere. It is a valuable experiment full of great possibilities and deserves to be tried everywhere. For an enterprising man to take to farming, a sufficiently large plot of land, provided with water facilities and a decent amount of capital, will be ordinarily needed. And fortified with these, there is no reason why a few of our more enterprising cultivators, and even some of our agricultural graduates should not become successful farmers, if they seriously take to that industry.

91. The Tragedy;—In agriculture, the conditions essential for the successful organization of the industry are wanting in the case of a large body of workers; and the factors of production can not be economically utilized. The supply of land is inadequate, capital is available only on costly terms if it can be obtained at all, and labour power is wasted because for more than half the year it remains unemployed. It is estimated that in England and Wales the agriculural worker has, on the average, 21 acres of land, which is ten times the average of the worker in Bengal. Similar figures may be quoted for other countries. Of course, mere size is no index to the economic productivity of land, and intensive cultivation is carried on by the nations which have limited territory and whose land holdings are small. The cost of cultivating petty farms there is comparatively high, but the yield is proportionately higher. In India, on the other hand, under similar conditions, extensive cultivation is the normal practice involving little cost but yielding poor results.[1] Such is its tragedy that instead of being a whole-time and remunerative occupation, agriculture has tended to become, to the cultivator, a part-time and profitless subsidiary industry. This is a fact which is of

1 "India is a country of comparatively small holdings, often of the "allotment" size, but cultivated on an extensive system applicable to large areas and under a method which as it utilizes to the full neither the energy of the worker nor the productivity of the soil, is the reverse of economic."—Census Report, 1921, Vol. I, Page 244.

prime importance in a country which is described as agricultural and also deserves to be carefully noted in view of the increasing attention that is being paid to the question of encouraging cottage and subsidiary industries and of the laudable effort that is being made to help the cultivator to earn a living by combining spinning and weaving with his agricultural pursuits.

This is then the deplorable state of India's premier industry. Does it not point to the necessity of taking off superfluous people from land and finding other avenues of employment for them? Yet it is often asserted that India must long continue to be a country in which agriculture will be the predominant industry. If this statement simply means that there is infinite scope for the improvement of the agricultural industry in this country and that it will be many years before India will have established in it manufactures approaching the variety and magnitude of those of U. S. A., England or Japan, for instance, there is nothing in the observation to which exception may reasonably be taken. What is regarded as unwarranted, is the suggestion that India must be satisfied with the predominance of agriculture because her natural and social conditions render any other prospect impossible and because her sons are incapable of starting and managing large manufactures; and the idea that, in the world's geographical division of labour, agriculture has been providentially assigned to India as her peculiar province, manufactures having been successfully taken up by western nations, is one that need hardly be taken seriously.

That a good deal can be done by way of research on crops, soils, manures and so forth and by means of demonstration, education, co-operative credit and marketing, to improve agriculture in India is undisputed, and that way lies our hope for the future of the agriculture of the country. That farming, thus assisted, will materially add to the individual and national income, is happily not a matter of theory but of actual experience gained by cultivators themselves dealing with cotton, wheat, oil seeds, sugarcane, and other crops. The recommendations of the Commission on Agriculture to which effect is being given, show the direction in which reform should proceed. The problem of scientific research is being first tackled, and this will be welcomed only as a beginning to be vigorously followed up by other important measures. All this, however, does not prove that there is either no room or necessity for the rapid development of

manufactures. On the countrary, the two movements must run parallel and in harmony. The statement that India has ever been a purely or predominantly agricultural country can be true only in one sense viz. that she had no large-scale industries in the past. But all western countries have been agricultural in that way and have taken to manufactures only within recent times.[1] India has always had a splendid combination of agriculture and manufactures, and its wealth was the result of the profitable exchange between the country and the town. And the example of Japan is there to show how manufactures can be developed in a backward Asiatic country if judicious measures are taken to foster the growth of industries. Germany also evolved her industrial prosperity out of conditions which were hardly more favourable than those prevailing in India. Even England was a predominantly agricultural country till the end of the eighteenth century. "In 1770 England was still mainly an agricultural country and Arthur Young estimates that the income of the agricultural portion of the nation was larger than that of all the rest of the community."[2] While it is foolish to trade on the achievements of the past, it is just and proper that we should have a correct historical perspective in the consideration of this problem and the industrial resurrection of India. The ruralization of the country has gone to such a length that the industrial capacity of the people, their talent and their natural and acquired aptitude have been forgotten. The industrial and commercial glory of India appears to have passed into a myth, and an account of the old indigenous industries and arts will read like a fairy tale. The history of Indian shipping and ship-

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1 "I do not agree that India is an agricultural country; India is as much a manufacturing country as an agricultural; and he who would seek to reduce her to the position of an agricultural country seeks to lower her in the scale of civilization. I do not suppose that India is to become the agricultural farm of England; she is a manufacturing country, her manufactures of various description have existed for ages, and have never been able to be competed with by any nation whenever fair play has been given to them. I speak not now of her Dacca muslins and her Cashmeer shawls, but of various articles which she has manufactured in a manner superior to any part of the world. To reduce her now to an agricultural country would be an injustice to India."—Mr. Montgomery Martin: Quoted in "India in the Victorian Age" by Mr. R. C. Dutt.

2 Gibbins: Industrial History of England.

building, to take one example, would show what great progress[1] had been made by the Indian people in industrial development. The inquiries of the Indian Mercantile Marine Committee have brought this question to prominent notice and its report suggests what measures may be beneficially taken to encourage the industry in India. The conditions in which shipbuilding and shipping are carried on to-day are radically different from what they were, and the revival of the old activities in those respects is surrounded with great difficulties. The same remark has to be made with respect to industrial enterprise in other directions, especially in view of the radical change which has come over its national organization and international relations. The inherent industrial capacity of the Indian people is, however, undoubted and the latent possibilities of the country are acknowledged on all hands. With systematic organization and patient and zealous encouragement, a variety of industries will rise in India, placing the nation's economic activities in a proper equilibrium and making her people progressive and prosperous.

92. The Charkha Movement:—Besides the forms of the organization of industries so far considered, there are others such as cartels and trusts, co-operation, socialism and communism. The combinations of the first of these classes, are slowly making their appearance in India, some of them being national and others international, in scope. The tobacco, the textile, the match and the mineral oil industries supply illustrations. Rationalization and systematic and effective control of production and prices are the main motive of this type of combination in which a number of industrial concerns agree to work or are brought under one management. Co-operation will be discussed in a subsequent chapter, and as to socialism, it is, at present only an ideal preached by some. Western influence is actively working on the minds of these people in India in this respect; and the national control of the instruments of production, land and capital, is their goal. It is not only orthodox socialism but communism of the Marx-

1 "In ancient times the Indians excelled in the art of constructing vessels, and the present Hindus can in this respect still offer models to Europe—so much so that the English, attentive to every thing which relates to naval architecture, have borrowed from the Hindus many improvements which they have adapted with success to their own shipping......The Indian vessels unite elegance and utility and are models of patience and fine workmanship."—A French writer quoted by Radhakumud Mukerjee in his *History of Indian Shipping and Maritime Activity*.

ian pattern, which has a fascination for certain imaginations, and elimination of private property and communal, instead of the prevailing individual, ownership and control of economic activities is regarded as the sovereign remedy for the country's ills. Machinery, a proletariat and mass production are essential features of this scheme of things.

On the other hand, there is another trend of thought working in India which comes into direct conflict with the ideal just mentioned. The evils of the factory system have become so patent in the west that earnest endeavours are being made there to "deurbanize" national industries and to restore to villages the simplicity, the charm and the healthiness of the olden times. The advocates of a rural revival in England make it quite clear that they are not opposed to industry, manufacture or trade. "We are not out against machinery," they *point out,* "*but are out against that attitude of mind* which has turned all those essentials of real healthy life, the necessities of national production, into instruments of human degradation." "We are out to remedy a state of things," they proceed to say, "which denies to the mass of workers any opportunity of industrial initiative, any scope for the exercise of the creative birthright which distinguishes the free worker from the slave." The case of the Indian village and the workman is not, in one respect, yet so hopeless as that of his prototype in certain western countries, and it is, therefore, urged that steps should be taken to save our countryside from the disaster of the factory regime before it is too late. We here take the "Charkha" as a representative of rural crafts and life and the Indian movement in favour of its revival as intended to impart physical, economic and moral health to the people of India. The movement is likewise calculated to counter the competition of foreign manufactures which has killed one of the most important of indigenous cottage industries. It has thus an economic and a political aspect and the ethical element is also not wanting in it.

For our present purpose it will be desirable to fix attention mainly on the purely economic aspect of the Charkha movement without altogether ignoring its political, ethical, and social bearings. Students must carefully consider the object or objects of the movement, its means and measures and their operation and expected effects upon the people in order to be able to form a just estimate in the matter. To begin with, as an important plank in the programme of

non-cooperation then just started, a resolution of a special session of the National Congress at Calcutta, years ago, described hand-spinning and hand-weaving and the wearing of khaddar as measures of discipline and self-sacrifice for every man, woman and child. The Nagpur Congress later passed a resolution in favour of making India economically independent and called upon merchants to "carry out a gradual boycott of foreign trade relations." Economic independence was, in the opinion of many, a condition precedent to the establishment of Swarajya, and so one necessarily to be satisfied for ensuring its continuance. To restore to each village economic self-sufficiency was likewise an ideal preached in this connection. The Belgaum Congress session made the hand-spinning of yarn the franchise for the membership of that body, and as a result, yarn-spinning and the propriety of insistence on the wearing of Khaddar became subjects of continuous and animated controversy in Congress circles. These disputes led Mahatma Gandhi, the great apostle of the charkha movement, to start a separate institution, the Spinners' Association, which would work independently of the Congress. A vigorous and a large-scale effort has been made to popularise the use of the Charkha and of khaddar, and the movement has raised a number of complex and difficult questions in the realm of theoretical and practical Economics. It will serve our immediate purpose to select for discussion one of the most important arguments urged in support of the spinning wheel and the handloom viz. that their spread is designed to create a supplementary industry for the cottages of the poor and starving cultivators who have no employment during a large part of the year when agricultural operations are impossible and other work is not available.

Now, hand-spinning has been, for centuries, a home industry carried on by women all the world over. The spinning wheel and the spindle, once regarded as an emblem of womanhood, have been plied by them in their homes, and in India, the woollen and the cotton yarn produced has been sold in the local markets for the use of the professional weavers to be converted into blankets, dhoties and sarees or sometimes woven in the home itself. The cloth turned out from the home spun yarn was in universal use in the country. Middlemen would collect the yarn or buy it in the town markets and supply weavers with the raw material; or the yarn would be directly taken to the weaver to be turned into cloth. This form of

domestic industry still persists very generally with respect to woollen blankets in rural areas. In villages at a distance from the railways and the highways, the same system persists with reference to cotton also, and the bulk of the imports of foreign cloth are consumed by dwellers in towns. But the yarn produced in the indigenous mills has largely superceded the hand-spun material in the country, and the middlemen and the weavers prefer the former stuff as being cheaper, finer, more suitable and easier to handle. Handloom-weaving still holds its own, whereas hand spinning has gone under in the competition of machinery, as there is sufficient demand for its products though the number of handlooms plying in the different districts has steadily declined.[1]

Handloom-weaving has been a specialized craft, giving full employment to the workers throughout the year, though the Salies and the Koshties have been partly agriculturists also. But hand-spinning has never been such a craft—it has ever been mainly a subsidiary occupation for women. It has been given up because carding and spinning no longer pay and can not compete with gins, presses and mills. The moment cotton-growing is started in a tract, gins and presses spring up, for instane at Baramati in the Poona District. It is proposed to revive hand-spinning as a cottage industry for men as well as women in order to provide them with work, and consequently with sufficient food and clothing, and likewise to preserve rural industrial organization from being destroyed by the invasion of modern machinery. Educated classes are exhorted to spin yarn, even for half an hour a day, in order to set an example to their illiterate brethren, the cultivators and labourers. Success in this effort at the rehabilitation of the Charkha in rural homes, will depend upon the success with which (1) men as well as women may be induced to ply the spinning wheel as a regular supplementary occupation, (2) a sufficient number of weavers may be found to use hand-spun yarn on their looms, and (3) popular taste may be regulated and controlled in favour of using hand-woven Khaddar made of hand-spun yarn in preference to machine-made cloth. Economic forces must obviously assert themselves here in the long run, unless there is a complete aesthetical and moral revolution, and are bound to set limits to the permanent progress of the Charkha movement.

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1 Government reports on the revision settlements of land revenue in taluka after taluka tell the same tale of the diminishing number of looms.

93. Limitations and Possibilities:—Whatever other causes may be responsible for the disappearance of the Charkha from the cottages of the rural population, the advent of modern machinery in our midst and the attraction of other work is one of the most potent. It has been displaced by the spindle in the factory by the same process by which the steel and the iron roller in the cottage have been displaced by the ginning machine, the copyist's reed by the steel and the fountain pen and the power-driven printing machine, the stone hand-grinding mill by the power-driven flour mill, the tailor's needle by the sewing machine, the bullock-cart by the railway and the automobile, the 'ghani' by the mechanical oil press, the leather water-lift by the suction pump and the wooden by the iron plough. We have adopted and are fast adopting less troublesome and more economical and efficient methods of production and transport, and familiarity is taking off the edge of novelty and creating a demand for a more extended use of machinery and improved tools. Men and women even of jungle tribes can now earn more than half a rupee a day in a factory and can spend it on mill-made cloth and can not, therefore, feel inclined to work at the charkha or the loom. You can make water run up-hill more easily than expect human nature as it is and as it promises long to remain, to resist the use of things which are more economical, convenient and pleasurable. Though the adoption of improvements like these mentioned above, has thrown thousands of artisans and craftsmen out of employment, it has also opened innumerable new avenues of work for the people, at the same time. The railways probably give employment, directly and indirectly, to more workmen than they have displaced; and the workshops, mills, mines and factories are drawing the backward tribes and communities from their hilly and forest homes to earn cash which was long a rarity to them. The real problem is, therefore, one of all-round readjustment and suitable and healthy adaptation[1] and not of the prescription of a single universal specific.

The Charkha, preferably in an improved form, can be established with benefit in the homes in villages which have not been penetrated by railways and machinery and among classes socially too

1. See the Author's article on this subject in the Journal of the Indian Economic Society for June, 1921.

low and otherwise too helpless to take to any other occupation. The admirable work which is being done by Mahatma Gandhi's organization in this respect is, therefore, worthy of the highest praise. The movement is attacking the problem of rural unemployment from the side both of consumption and production. The Charkha is calculated to occupy unemployed hours and supplement the small earnings of the poor labourer and cultivator, and more weavers than now may ply a profitable trade in those conditions. Wool is spun and woollen yarn is woven into blankets in this way in numerous villages at the present moment, and the industry has a place cut out for itself. Handlooms in rural areas are to-day engaged in the production of saris, bodice cloth and turbans of medium and high qualities, and even in this field, mills have begum to compete with them, and mill-made yarn is used almost exclusively. Khaddar will similarly have a general demand for specific purposes and will also satisfy a common want in certain rural areas. But it has its limitations. Khaddar is dearer than mill-made cloth and is less durable, besides being rough. Work on the Charkha will give employment as famine and charitable relief and it will be an effective means of raising the economic and social status of the depressed classes. It is admittedly a home occupation peculiarly suited to the life and the capacity of rural women and can be revived on a large scale only in that form. Nothing is gained by indulging in exaggerations in praise of the Charkha except that it may prove useful as propaganda in the initial stages, and if the permanent and substantial good of the poorer classes in the country is to be achieved, it is best squarely to face realities. Equally foolish will be a wholesale condemnation of the movement as uneconomic and impracticable. Truth demands that its possibitities as well as its limitations should be fairly recognized. Mahatma Gandhi himself has given the following explanation of the utility of the Charkha: "The sole aim advanced on its behalf is that it alone offers an immediate, practicable, and permanent solution of that problem of problems that confronts India, viz. the enforced idleness for nearly six months in the year of an overwhelming majority of India's population, owing to lack of a suitable supplementary occupation to agriculture and the chronic starvation of the masses that results therefrom. There would be no place for the spinning wheel in the national life of India, comparatively small as the remuneration that can be derived from it is, if these two factors

were not there."[1] The Charkha has in its favour the facts that (1) the raw material of the industry is abundant and cheap in India, (2) the skill required in spinning, if not in weaving, can be easily acquired, and (3) khaddar satisfies an elementary human want. But it should be noted that khadi woven from hand-spun yarn is different from that made of mill yarn. And the pertinent question to ask here is whether the scheme promoted by the advocates of the Charkha is an immediate, a permanent and a complete solution of the problem to be tackled or is a temporary measure to be patriotically supported though in itself uneconomic.

It is true that at one time India clothed herself completely out of home-made cloth; but similarly did the Indian people supply their own means of transport and locomotion, their own sugar and paper and a hundred and one other things. The real cause for anxiety is not so much that the Charkha has disappeared from rural homes as that the total productive capacity of the mass of the population living in villages and their opportunities for honest work have not kept pace with their steadily growing numbers and wants. Spinning does indeed mean all the difference between starvation and a pittance to persons and families, but after all, hand-made cotton cloth can fill only a small place in the progressive industrial organization of India and will tend to be an item of very minor importance in the domestic economy of the poorer classes taken as a whole. A more serious question is how to bring about a general readjustment of the social and economic forces which have disturbed the old equilibrium and have affected even the production of an adequate food supply for the growing population of the country. Though Mahatma Gandhi is not blind to the possibilities of other measures to improve the lot of the rayat, his movement brushes them aside and concentrates itself on the Charkha. To take one or two instances. If the rate of interest which our cultivators have to pay on their borrowings, were reduced to a reasonable level, the saving will amount, on a rough calculation, to the value of the whole of the Khaddar produced when the Charkha movement is a complete success, and what is saved is so much gained. Similar increases will take place in agricultural income if improved varieties of seed are used and more economical processes are followed in land-cultivation. This kind of work is equally worthy of the sacrifice of public-spirited people. The

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1 From Gregg's *Economics of Khaddar*.

problem will be placed in its proper perspective if spinning and weaving are regarded as a portion of the industrial ground that has to be covered and if it is systematically carried on with that aim in view. Economic reconstruction will, therefore, have to be effected in various directions and in consonance with the spirit of the times; and no exclusive pursuit of one subsidiary industry and no wholesale revival of a by-gone age is either practicable or desirable. The spinning wheel certainly has its place, but it can not be a specific for all our economic ills as it is represented to be. Salvation must be sought in a more efficient economic organization all round, in agriculture as well as in industry and trade.

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CHAPTER VIII.

PRODUCTION AND POPULATION.

94. Increase of Population :—We have already laid stress upon the peculiarly urgent importance of increasing the production of wealth of every kind in India, and pointed out that this can be ensured only by an increased efficiency of the agents of production. An increase in population is itself taken as an indication of the progress and prosperity of a nation because the growth is possible only under favourable conditions, political, social and economic as well as physical. Wealth is indeed not an end but a means to an end and is produced not for its own sake but in order to be consumed.[1] The connection between population, national well-being and wealth-creation is thus very intimate and they react upon each other. Apart from the importance of numbers for the defence of the community, growth of population is necessary for augmenting the output of wealth; and the latter, in its turn, promotes the increase and well-being of population by increasing consumption, enhancing efficiency and improving the conditions in which the community works and lives.[2] How will forces of nature

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1 "The production of wealth is but a means to the sustenance of man, to the satisfaction of his wants and to the development of his activities, physical, mental and moral. But man himself is the chief means of the production of that wealth of which he is the ultimate aim."—Prof. Marshall: Principles of Economics.

2 "Defence is still of more importance than opulence, and an increase in numbers means in general an increase in military power—actual or potential. Equally obvious is the increase in man's power over nature. Even simple combination of labour has its advantages, as has been admirably shown by Mr. Gomme. Still greater are the advantages of complex co-operation, as we see in our own days in the rapid development of new countries in which the progress of centuries is forced into a few decades. The growth of population is necessary to the improvement of the means of communication and of trade, trade brings capital and capital and land both give for a time an increasing return, and thus the increase of population means an increase of wealth per unit."—Prof. Nicholson: Principles of Political Economy.

be controlled and harnessed for the use of mankind if there is not a sufficient number of hands to work, particularly in the earlier stages of civilization when human physical power is the greatest asset ? Numbers count for much among the struggling and warring savages though their hordes have to wander over the face of the earth in search of food. Depopulation was a potent cause of the ruin of the Roman Empire which could not defend itself against the waves of barbarian inroads, while, on the other hand, over-population is a constant cause for anxiety to nations that can not maintain their standard of living with increasing numbers. Immigration and emigration assume peculiar importance, therefore, according to different national conditions.

How vital is the problem of the size and the growth of population from the point of view of defence, was demonstrated afresh by the experience of the world-war. The sheer volume of the population in the belligerent nations counted in it as a factor of no small importance, and for several years before the out-break of the struggle, the stationary condition of the population in France had been a cause of anxiety and alarm. Colonies, where land is abundant and the soil fertile, invite settlers from the old world and immigration tends to augment wealth. An increase in labour power conduces to the efficiency of production, and a growth of population will augment the national income. British colonies like Fiji and Guiana are trying to attract Indian labour by offering tempting terms though the self-governing Dominions are anxious to maintain themselves White. A natural increase of population is welcomed also because it represents an excess of births over deaths and bespeaks peace, health and prosperity in the community. Maintenance of civilization and of national existence are threatened by a stationary or a decadent state of population. Numerous progeny, long life and abundance of material wealth have ever been the ideals of mundane life in this country and have formed the subject of divine prayers and of benedictions from Vedic times to the present day.[1] The animal instinct to multiply provides the natural source for the augmentation of numbers, but its intelligent regulation which pre-

1 The usual benediction in the case of a Hindu married woman, wishing to her the birth of eight sons, is well-known.

supposes advance of civilization, is ensured by laws, customs and deliberate action.

95. Varying Conditions :—In the statement that in certain circumstances an increase in population will be accompanied by *growing welfare*, as it will assist *in raising the efficiency* of the production of wealth, and therefore, in augmenting the volume of the national dividend, the qualifying conditions are important because a growing population will only bring on or aggravate poverty if the additional numbers are not able to produce a surplus of wealth. It is true that man comes into this world with one mouth and two hands, but the latter may not produce enough to feed the former, much less to support others. These likewise involve an initial cost to the community in education and up-bringing. The population, with additions made to it, will press on the soil, setting at work the law of diminishing returns, the food supply will prove inadequate and the condition of the community will deteriorate. It is, therefore, necessary that increasing population should make more than a proportionate contribution to the national dividend if the material and the moral condition of the community is to improve.[1] But it is not easy to determine the standard of necessaries and comforts by which to judge the improvement and deterioration as it varies from community to community and from time to time. As has been pointed out above, the pressure of numbers drives hords of savages ever to fresh fields and pastures new; and an adjustment between population and the available means of subsistence is always in operation in all countries. And the important question is how does this adjustment take place?

There are two ways in which the situation is met consciously or unconsciously. Either the fierce struggle for existence stimulates the people to greater effort and to progress or it overwhelms them and they succumb and degenerate. All countries are not in the happy condition in which an increasing population leads to increasing welfare. Increase of population in Germany was very large before the war, and it was stated that the effects of growing numbers there did not prove detrimental. On the contrary, it is

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1 "An increase of population accompanied by an equal increase in the material sources of enjoyment and aids to production is likely to lead to a more than proportionate increase in the aggregate income or enjoyment of all kinds."—Marshall: Economics of Industry.

claimed that the pressure of increasing numbers had a stimulating effect upon the German character, goading the young men on to work with greater vigour and efficiency and that instead of being content with their share of paternal wealth, as would be the case in countries like France, where population is almost stationary, German youths struggle hard and make their way in the world.[1] But even granting that the above conclusion applies to the majority of communities in the world, there is another aspect of the problem which demands consideration and it is the implication that there will be a continuous race between population and subsistence. We take growth of population as a natural phenomenon over which human beings have no control or assume that it is beneficial to mankind and then try to promote the increase of subsistence in order that it may overtake population and surpass it if possible. Nature seems here to mock man and to set him to pursue a mirage. The lure of happiness drags him from disappointment to disappointment and pessimists and spiritualists, therefore, insist upon the necessity of man's emancipation from the tyranny of carnal pleasures. But if population did not grow or if the increase was very small, will not the individual share of the national dividend be larger ?[2]

Natural animal instincts are, however, given a free play as a rule, and if there is any interference with freedom in this respect it is exercised only to restrain immorality and often times to stimulate the growth of population in the interests of the community. If there is to be no check to increase in numbers, it follows that there has to be at least a corresponding addition to subsistence if the equilibrium between the two is to be maintained; and greater importance, therefore, has been attached to the side of production. It is commonly believed that it is natural for man to live and multiply; he can not do otherwise; and if experience shows that numbers outstrip the production of food and other necessaries and that, therefore, the material condition deteriorates, emigration or philosophic resignation must be resorted to as remedies. If man does not do the needful to restore the balance, nature has her own way of dealing with the

1 Howard: Recent Industrial Progress of Germany.

2 "When growth of population is accompanied by various occurrences that operate favourably upon production, and the average *per capita* income then increases, the growth of population will have exercised its harmful effects all the same; there would have been far greater increase of the average income had there been no increase of population."—Pierson: Principles of Economics.

situation. Through the agency of diseases and death, nature seeks to reestablish the equilibrium between population and production, which is being constantly disturbed by a disproportionate increase of numbers. Malthus, the celebrated English economist, was struck with this fact and his observation of contemporary social phenomena and his study of the history of different countries, led him to ask the question, "can not the disparity between population and food be corrected by means other than those adopted by nature?" He, therefore, sounded a note of alarm and gave a warning, pointing to what he thought was the only effective alternative remedy, viz. moral restraint.

96. Malthusian Doctrine :—During the last few years, wealth-production has made such giant strides, particularly in the west, as could not have been anticipated by Malthus, and recent developments appear to have falsified his gloomy forebodings that the quantity of the means of subsistence would not be able to keep pace with the increase of population. He had maintainted that unless people voluntarily kept down the growth of population by moral preventive restraint,[1] positive checks like famine and disease would come into operation, making the lot of mankind miserable. What is, however, the actual position to-day? Mass production has forced on nations indulging in it a policy aptly characterised as 'consumptionism' and consisting in strenuous efforts to find consumers for the superabundant wealth produced.[2] There is a continuous improvement in the standard of living of the working classes and the birth-rate is being deliberately kept down by the cultured and the well-to-do people.[3] Several persons marry late in life or do not marry at all. Many couples want to have all the pleasure of married life but not its responsibilities and they thus follow

1 By moral restraint he meant not the limiting of the number of children in marriage but celibacy, postponement of marriage and abstention from all sexual relationship.

2 "Everywhere we see wealth increasing at a greater rate than population—in new countries like the United States as well as in old countries like France—so that our first concern is rather in the opposite direction."—Charles Gide: Political Economy.

3 "There is no question that this general situation—marriage rates virtually stationary and yet declining birth-rates—is due to deliberate abstention from propagation. Married couples have fewer children than before by deliberate intent."—Taussig: Principles of Economics.

consciously or unconsciously, the teachings of Neo-Malthusianism which are not, however, the same as the precepts of Malthus. The birth-control movement is fast spreading in western countries and is now being promoted in India as well. The volume of literature dealing with sex, directly and indirectly, is steadily growing in the west, and sex education is being insisted upon as an important part of the up-bringing of the child. Vigorous efforts are being made to popularise the use of contraceptives. While the deplorable state of sex-relations in India has been painted in the blackest of colours in books like those of Miss Mayo, a search-light has been thrown upon equally bad, and probably worse, conditions prevailing in the west, by rejoinders provoked by these books and others written by westerners themselves, e. g. Judge Lindsay.

It is then the preventive check urged by Malthus and particularly by his followers, combined with larger production of wealth, which has brought about the result that is pointed out as a refutation of his famous doctrine. It must be said in fairness that it is a justification rather than a refutation, though his assumption of the natural laws of the growth of population and of diminishing returns was arbitrary. Optimists have attacked his doctrine on the ground that it underestimates human capacity to produce wealth while pessimists have supported it with the plea that the optimum limit of population in relation to food supply must be reached one day if its growth is not deliberately checked. The prospect of an excessive as well as a deficient population causes alarm. While a nation like France fears the latter, the former is a cause of anxiety in India. Now, over-population is a relative term. It means excessive population in relation to the food and other necessaries of life which a community commands. Even a small community may be overpopulated if its means of subsistence are limited and are incapable of expansion while large numbers will not feel the pinch of the demand for food if their productivity keeps in advance of the increase in population. There is thus a relative and an absolute overpopulation. The deliberate exercise of preventive checks accompanied by a growing command over wealth and improved sanitation and health, has contributed to a lowering of birth-rates and death-rates. Birth-control has, to-day, become a craze in western countries and is being preached specially for the benefit of the poorer classes and of women in particular who are most affected by the birth of children.

The movement opens a number of questions of ethical, social, religious as well as economic importance into which it is not possible to enter here, and we must content ourselves with observing only that the far-reaching effects of birth-control and the use of contraceptives must take long fully to manifest themselves, that what has been accepted as necessary and desirable in the West (there are even there influential dissentients whose opinions are every way worthy of consideration) may not be so in India and that those remedies can not carry us very far in the solution of our difficulties in this country. Admitting, however, that the doctrine of overpopulation has lost its terrors for modern society on account of its enormously augmented power of production and that the stress has been shifted from food to comforts and luxuries, still further that 'since man is the chief labour force, large numbers, indeed other things being equal, mean greater national strength and power,' we must not lose sight of the fact referred to above, that other things may not be equal and growing numbers may not mean increasing national wealth.[1]

It must also be borne in mind that 'a rate of growth sufficient to enable it to *keep pace with* population is not all that we require of production, otherwise the average income will never rise.' If the means of subsistence are perpetually to strive to overtake expanding population and are never to be adequate to afford a steadily increasing share of wealth to the population as it advances, the prospect is surely not very cheerful. A stationary population need not cause alarm[2] unless we are to despair of the future of civilization and

1 "The reverse may not be true if other things are not equal. A small nation with greater productive efficiency, like England, will out-rank a more populous country like India. Smaller numbers with fairly equable distribution of wealth are preferable to a dense population living in the extremes of misery and opulence. Mere numbers are, therefore, not the vital point."—Seligman: Principles of Economics.

2 "For mankind as a whole, declining birth-rates and lessening pressure on population mean progress, and not deterioration. The prevalence of habits of prudence among all strata means a gain in human happiness. Possibly the time will come when this sort of prudence will be carried so far that the advanced communities will no longer increase at all."—Pierson: Principles of Economics.

must have large numbers of human beings in readiness to be thrown into the haulocast of defensive or offensive war with neighbours and strangers. The idea that large numbers are required for defence and for aggression, appears to have been shaken by the last world-war. The League of Nations, the concrete lesson of the futile, suicidal and immoral character of war is, however, of the nature of an experiment and it will be long before the waste and the destructive activities of armaments will cease or will be substantially curtailed so as to yield the much-needed relief to mankind. In scientifically improved warfare of the future, the smallness of numbers will be offset by mechanical improvements and chemical inventions. The Fascist policy of Italy is opposed to the limitation of the population for national as well as religious reasons. Catholic communities regard birth control and limitation of families as immoral and their views in this respect agree with those of the bulk of the people in India. The vast numbers of China, India and other eastern countries, contrasted with the slowly growing or stationary populations of the West, fill thinkers of Europe with alarm.

97. Indian Conditions:—The principles of population briefly discussed above, may now be applied to the social and economic conditions of India with a view to an examination of the tendencies in this country. The teeming population of India is often spoken of with a sense of pride and satisfaction, but a scrutiny of the statistics of the people and of their state of living will not fail to create quite different feelings. Quality must matter as much as if not more than quantity in the case of the population of a country; otherwise a mere increase in numbers is a veritable danger. A useful study of the relation of the population and the economics of a country, must take account of (1) the proportions of men and women, (2) the numbers at various ages and stages of life, (3) the numbers of married couples, (4) the fecundity of marriages, (5) the size of families, (6) average expectation of life, (7) brith and death rates and (8) the numbers of rural and urban inhabitants. We give the more important statistics in this connection in the appendix at the close of this chapter and shall deal with them briefly in this place. The total population of the whole of India, according to the census of 1921, was 31,89,42,480 as compared with 31,51,56,396 in 1911, representing an increase of 1·2 per cent. The real increase, which excludes that due to extension of areas and improved accuracy of enumeration, during the 49 years

between 1872 and 1921, aggregated 20·1 per cent. and was reached as follows :—

1872–1881...1·5 per cent.
1881–1891...9·6 „ „
1891–1901...1·4 „ „
1901–1911...6·4 „ „
1911–1921...1·2 „ „

The comparatively small increase during the ten years, 1911–21 is attributable to the enormous mortality caused by the influenza epidemic which ravaged the country in 1918–19, and carried away nearly $1\frac{1}{4}$ crore of persons. The brith rates vary slightly in the different provinces and during the decade of the last census, were seriously influenced by the brief but deadly prevalence of influenza. The average normal birth rate may, however, be taken at 39 per mille and the death rate at 30 per mille, so that the natural increase of the population, that is, the excess of births over deaths, is approximately 9 per mille. A similar rate of growth is to be seen in several European countries, but there both the birth and death rates are lower than in India. Physical, economic and social conditions peculiar to this country, combine to raise the death rate high while it has been brought down to a surprisingly low level by improved sanitation and public health in the west. The waste and misery involved in the high rates of births and deaths in India provide food for serious thought.

The density of the population varies in the different parts of the country and is dependent upon physical configuration, climate, quality of the soil, rainfall, the state of industries and other conditions. Bengal, with an area which is only 5 per cent. of the total for the whole country, has a population which is 15 per cent. of the aggregate Indian population. Corresponding figures for the United Provinces are 6 and 15 per cent. and for Madras, 8 and 13 per cent., while for Bombay, they are 10 and 8 per cent. and for the Punjab 8 and 8 per cent. The higher density of population in Bengal which rises to 1,000 persons per square mile in certain parts of that Province, is easily accounted for by the assured and plentiful water supply and the fertile alluvial soil. The relation of these conditions and density is reflected in the figures for various districts in the Provinces. Central India and Rajputana do not possess favourable

physical conditions for cultivation and Sind's sandy soil and absence of rain render human occupation of large tracts impossible. Stretches along the western and eastern coasts of the peninsula where rainfall is adequate and certain, have greater density. Gujarat has a density of 292, Kaira district having as many as 445 persons per square mile, the Karnatak has 187, the Deccan 158 and Sind 91. The district of Malabar shows a density of 585, Godavari district on the east coast 578 and in the State of Cochin where nature is uncommonly bountiful it is 662. The average of population per square mile for the whole country is 177, the mean density in British territory being 226 and in the Indian States 101. The Census Report gives comparative average figures for other countries which are reproduced below :—

Average Density per square mile.

Belgium	...654	Austria	...199
England and Wales	...649	Spain	...107
France	...184	Japan	...275
Germany	...332	United States	... 32
The Netherlands	...544	New Zealand	...11·8

The above statistics deserve careful attention. The differences in the degrees of density between the provinces, Bengal and Bombay, for instance, can be accounted for by the natural peculiarities which distinguish them. Large plains with fertile soil and irrigational facilities are conducive to a rapid growth of population while hills, jungles and wastes have a restraining effect. But density figures must be used for purposes of comparison and inference with caution. A nation or a community living in a small area may be comparatively numerous and yet have greater material prosperity than a people occupying wider territory. The average density displayed in the above table for Belgium, England and the Netherlands, is higher than that of many thickly populated provinces of India e. g. 578 for Bengal, 444 for the United Provinces, 340 for Bihar and Orissa and 297 for Madras. The economic condition of a community is determined by several factors. The land on which it lives is one among them and its influence on material well-being varies with the occupations and the capacity of the population.

98. Pressure of Population :—Density being arrived at by merely dividing the numbers by the amount of space, it must be considered with direct reference to (1) natural resources, (2) people's

productive capacity and (3) the standard of living. The countries of Europe in which density is high, do not depend for their livelihood only on the produce of land; therefore the ratio of numbers to space by itself signifies nothing. The mining, metallurgical, manufacturing and other industries which the population carries on, combined with foreign trade, shipping and banking, enable the nations to supplement their agricultural wealth, which is itself produced most intensively. That is how it is possible for dense populations in Europe to maintain a high standard of living, and the high density of cities and other centres of industrial and commercial activity even in India e. g. Bombay island, is not incompatible with economic prosperity. In Europe, again, the average density of population per square mile does not exceed 250 in agricultural tracts whereas in India, in several districts, it is much higher, being three to four times that figure in large parts of Bengal. Industries and trade little affect the density of pouplation in India, taken as a whole, the determining factor being agriculture which supports more than two-thirds of the people.[1]

It will not be unfair to conclude from census statistics that the pressure of the population on land is severe in most parts of the country. It is true that relief can be obtained through migration and the cultivation of tracts which have not yet been brought under the plough. Extension of irrigation and the improvement of cultivation will also mitigate the pressure. It may also be argued that the standard of living of the population affected is so low that a little deterioration is not appreciably felt. Though according to the census report, 'about one-third of the population occupies rather more than two-thirds of the area at a density below the mean of the country and one-sixth of the area is occupied by nearly half the population at a density of over 350,' internal migration does not appear to be practicable to an appreciable extent and likely to produce a substantial effect on the standard of living. Canal areas, as in the Punjab, where extensive stretches of land, which were waste at one time, are now

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1 "In large areas, such as the natural divisions which here form the basis of the discussion, manufactures and trade affect the density to a comparatively small extent; and even the number of individual districts whose density is greatly affected by the existence of the trading and industrial centres is still comparatively small. Moreover, while in Europe, as we have seen, agriculture is unable to support more than 250 persons to the square mile, in India there are some purely agricultural tracts where it already supports three and even four times that number and others where it can not support a tenth of it."—Census Report, 1911.

smiling with prosperous colonies of cultivators, and sparsely populated parts of Central India and Sind, may draw off a certain number from congested districts but room for such redistribution is, at present, very limited. This will, again, be only a palliative in the case of a population dependent on the cultivation of land, whose standard of living is admittedly low and which is still steadily increasing. In many of the Indian States, the population is not very dense and migration to their territories and the cultivation of tracts newly supplied with irrigational facilities indeed provide considerable scope for improvement, and though further agricultural development seems to be difficult, in existing circumstances, and certain areas are still thinly populated mainly because they are poor, rocky and inhospitable,[1] our hope lies chiefly in the intensive cultivation of land[2] now under crops and extensive cultivation in the manner indicated above. Only a national policy boldly planned and enthusiastically carried out on such lines, is calculated to produce tangible results which will destroy the bogey of overpopulation.[3]

As the density of population must be considered in relation not to the total but to the cropped and cultivable area, looked at from this point of view, the density of the long coast strip of territory above and below Bombay, covering Thana, Kolaba, Ratnagiri and Kanara, is above 1,000 and is between 300 and 500 towards the east. If 500 or 600 persons are packed in an area of a square mile *in some provinces it is because they are resourceless and their* standard of living has become hopelessly low, and not because land can really support such a number. Thus with regard to the west coast districts of the Bombay Presidency, the census report of 1911 remarked that in proportion to its cultivable area, the Konkan supported a larger population than any other division. The soil is not especially fertile there. "There is a thriving fishery industry, and natives of Ratnagiri and Kolaba are employed as police sepoys, choukidars and labourers in Bombay and lascars on ocean steamers and they remit a large portion of their earnings for the support of their families at home." It is in this way that the population of the Konkan with 227 persons per square mile is supported, and it

1 See P. K. Wattal: The Population Problem in India.

2 Read an interesting article on this subject by Rajani Kant Das in the *Modern Review* for October, 1929.

3 See above pages 255, 260–264.

does not argue any remunerative character of agriculture there.[1] Several other tracts may be found to disclose a similar phenomenon, and one would be hardly warranted in indulging in optimism with respect to the productive possibilities of a majority of the provinces unless persistent and vigorous efforts are made by the state and the people to increase the efficiency of production all round.

99. High Prices and Food Supply:—Mr. K. L. Datta's investigation into the causes of high prices, revealed the fact that during the period under his inquiry, the population of the country was growing faster than the food supply. He maintained:—"Considering the growth of the population and the increase in the external demand, the supply has been short during the greater part of the period embraced in the enquiry. The demand for both internal consumption and exports having increased at a quicker rate than the production of food grains, it is only natural that the general level of prices of food grains, over a series of years, would rise, although in a particularly favourable year it might have fallen to some extent. The food supply in India compared with the demand, both internal and external, reached its lowest level in the quinquennium 1905–09, and this shortage of supply has doubtless contributed, in no small measure, to the unusual rise in prices during that quinquennium." [2] A comparison of the growth of population and of the production of food grains, is presented in the following table, in which index numbers representing the increase, are given :—

	Average of the quinquennium 1890–91 to 1894–95.	Average of the quinquennium 1895–96 to 1899–1900.	Average of the quinquennium 1900–01 to 1904–05.	Average of the quinquennium 1905–6 to 1909–10.	1910–11.	1911–12.
Population ...	100	101·6	103·7	105·6	107·8	108·4
Total area under cultivation...	100	98	103	105	108	106
Area under food grains ...	100	96	101	102	106	102
Production of food grains ...	100	98	105	99	113	109

1 On this, the latest Census Report has the following:—"Mr. Sedgwick is, however, doubtful whether any solid inferences can be made from these figures as to the pressure of population on wealth-producing capabilities of land owing to the impossibility of arriving at a satisfactory definition of cultivable area, to the intrusion of so many disturbing factors, such as the profits from the cattle industry and grazing areas, and to the difficulty of isolating those tracts which are entirely dependent on agriculture for the production of wealth."

2 Report on High Prices.

In their Resolution reviewing Mr. Datta's report, the Government of India, who did not accept his conclusions, contended that the statistics on which reliance had been placed and had to be placed, suffered from the fault of inaccuracy and that inferences drawn from such data must be taken with an amount of reservation. They, therefore, presented their own figures which, in their opinion, were more reliable, and concluded that there was "an almost precise parallelism[1] between growth of population and extent of cultivation," and that "the only interpretation which the figures can bear is that the correspondence between the two has been substantially maintained." Government also pointed out in support of their view that instead of deteriorating, the food supply had been improving, the further consideration that extension of irrigation must have resulted in an increase of the average out-turn and that the development of communication must have had the effect of enhancing the "efficiency" of the aggregate of food production.

Even if, for the sake of argument, the conclusion thus presented is admitted as correct, the situation could not still be described as satisfactory, because it amounted only to this that the increase in food supply had just been able to overtake and keep pace with the growth of population. A review of the present position based on the same considerations, leads to conclusions which are not different. Not only that. The equalizing process in distribution stimulated by the improved means of transport, would increase the food share of a small class of the population with larger purchasing power and leave a diminished quantity to be divided among the unfortunate majority. But it is argued that "the real problem as regards a country so situated is obviously to determine whether the purchasing power of the people generally has increased" and that the high prices of Indian exports in foreign markets have enabled the Indian cultivators to purchase larger quantities of the necessaries of life from abroad, which is tantamount to a larger production of wealth

1 Lord Curzon also had pointed to a similar parallelism in 1901 in referring to the growth of food supply during the preceding twenty years, so that taking the most favourable view of the situation we could only console ourselves with the conclusion that we were not going backward but were marking time for about thirty-five years!

in this country. And Mr. Datta observes that "India has now to part with much less of her produce to meet her foreign obligations for the simple reason that her produce has risen in value in European markets."[1]

With an inadequate supply and with prices ruling high in the Indian markets, articles of people's food have never been imported, except in times of famine, in appreciable quantities from abroad. It is, of course, arguable that there were no food imports because the internal supply did not require to be supplemented in that way. The true explanation, however, seems to be that the Indian population must have been underfed and that it did not possess purchasing power sufficient to enable it to supplement its stock of food grains with foreign imports. The fact that whenever there is a scarcity in one part of the country, the exports of food grains have to be stopped and wheat has even to be imported, is significant in this connection. Higher prices of food grains can not adequately compensate the Indian producer for the growing pressure of the population on the soil. Though the general level of prices has gone up in India, the share of the cultivator, in whatever benefit may accrue is, for obvious reasons, very slight. If more mouths have to be fed with the same or nearly the same quantity of food, the prices must rise and this rise can not be an object of congratulation or of consolation in view of the fact already noted that the closing of the other industrial avenues is driving many people on to the land. Further, in considering how far increase in purchasing power resulting from high prices of raw materials and food stuffs affects growth of population and expansion of demand for necessaries, account must be taken of the disparity between the rise of prices of imported commodities and the rise in the prices realized by cultivators for their agricultural produce. To maintain a growing population, it will be agreed, the soil must be made to yield more and the production of food grains per acre must increase owing to intensive cultivation. Agricultural improvements effected during the last few years have not augmented the yield to an extent of which account may be taken in this

1. The prevailing high prices were possibly caused by (1) shortage of food supply, (2) increase in rupee circulation as a result of Government's currency policy or (3) a combination of the two factors. Government and Mr. Datta agreed in rejecting (2) and (3) but disagreed as to the acceptance of (1).

respect.[1] However sound may be the proposition as a generalization, to state that what is important is increased purchasing power and not the quantity of food, it has little application to the question of the food supply of the mass of the people. High prices of food grains and raw materials may enable the rayats to part with less produce or to purchase more articles, imported or locally manufactured. But has the Indian population, as a matter of fact, done this and used the increased purchasing power to buy imported food ?[2] That is the relevant and the important question.

Apart from the commodities obtained in exchange for the raw materials exported from India, the productive power of the people can not enable them to supply themselves with necessaries of life in a sufficient quantity. Industrial specialization, under normal conditions, has its advantages ; and there is nothing inherently undesirable in a country exchanging its special products for those which are produced by other countries under peculiarly favourable circumstances. But India's dependence on the sole industry of agriculture, which is in a very backward condition, amounts to a national danger and has contributed to the decay and poverty of the people. Food is the *first consideration in* estimating the economic condition of a nation. And here in India, food supply is scanty and dear. Other things may have become cheaper and easily accessible to the masses; but this supply of comforts and 'luxuries' can not compensate for the deficiency or dearness of food. And it is worthy of note that before the war, 21 per cent. of the exports from the country consisted of food grains, and the average is now about 15 per cent. This is regarded in certain quarters as 'surplus' production; but it is, in a way, the life blood of the people poured out to maintain mere existence. 'Exportable surplus' and 'adequate supplies' of food grains are relative terms, and if cultivators sell agricultural produce,

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1 " We may at a conservative estimate, claim that the increase to the value of the agricultural products of India as a result of the labours of its Agricultural Departments, is already about 3½ crores annually or over £2,300,993 This is the result of *only ten years'* work, and *it* must be remembered that every year will show a progressive increase."—Mr. Mackenna: Agriculture in India.

2 The annual value of the agricultural produce of British India is roughly estimated at 1,500 crores of rupees. Rs. 3½ crores, the additional value referred to in the above, foot-note means an addition of 7/30 per cent. to the annual total agricultural production ! Though the increase is welcome, it should not be forgotten that the annual growth of the population amounts to ½ per cent,

a part of which is exported abroad, it is not because people have a superabundance of food but because they can not help it. A low standard of living perhaps creates the so-called surplus and that constitutes the *irony* of the situation. The operation of the law of demand and supply may explain it but it is cold comfort to people who must have more food. Two facts should be noted here: the extent of increased 'efficiency' of production of food as a result of improved means of transport and the favourable position of parts of the country which may have an exportable surplus, e. g. of rice in Burma and wheat in the Punjab. The nature of geographical distribution of food has here much to do with its total production.

100. Population and Food:—The question of the national dividend and of the estimate of the shares of the different classes in the community will be discussed in later chapters dealing with distribution and here we shall restrict ourselves to the relation between population and food-production in general. Widely varying estimates of national income have been made in the past; and so complex and difficult is the calculation that one could not claim any result, as even substantially correct. The problem came into sudden prominence owing to an inquiry which the Government of India undertook into the taxable capacity of the people in 1924 and the steps they took next year, on the pressure of the legislature, to have the practicability of making a detailed estimate of the national income, thoroughly investigated. Some economists have recently published the results of their study of the productive capacity and the income of the country or of its parts, and we shall have occasion to refer to them later. Some of the older estimates may be taken up first. Mr. Mackenna estimated the annual value of the agricultural produce of British India at over 1,500 crores of rupees, that is, about Rs. 45 per head of the population. And on this calculation, the total per capita income would be about Rs. 70. Dadabhai Naoroji calculated the income at Rs. 20 and Digby at Rs. 19 per head of the population years ago. Lord Curzon's estimate of the average income of Rs. 30 in 1901, is well-known, and Mr. Crammond put it at about 37 Rupees only a few years ago. As the purchasing power of money has violently fluctuated and has substantially declined during recent years, as a direct effect of the war, and prices have since declined, estimates of income expressed in terms of money, must be taken with due caution, as indicating economic

conditions. The old estimates of income referred to above, can not obviously be used for purposes of comparison without the necessary allowance being made, as in the face of the changed purchasing power of money, any higher money figures do not necessarily connote improvement. We are, moreover, concerned, in this chapter, not with the total income of the people but with the supply of food which is available to them.

The Famine Commission of 1880 gave the following relevant statistics :—

Population	...	...	180,350,000
Food Crops Area	...	...	166,250,000 (Acres)
Outturn of food	...	...	51,530,000 (Tons)
Consumption	...	...	37,165,000 („)
Surplus	...	...	5,165,000 („)

The Commission concluded :—" The agricultural and trade statistics of the past twenty years justify the conclusion that the increased production of all sorts has, up to the present time, more than kept pace with the requirements of an increasing population, and the known large area of land which may still be brought under profitable cultivation and the possibilities of securing increased production by means of improved agriculture and extended irrigation afford reasonable grounds of confidence for the future. "

The Famine Commission of 1898 gave corresponding figures as under :—

Population	...	...	215,927,181
Food Crops Area	...	...	180,421,323 (Acres)
Outturn	...	...	69,062,972 (Tons)
Consumption	...	...	58,535,845 („)
Surplus	...	...	9,564,127 („)

This estimate of outturn was, however, excessive and another quoted by the Commission itself, put the production at only 59 million tons, and therefore, the surplus at 1,700,000 tons only. And the Commission proceeded to remark : " Whatever may have been the normal annual surplus of food grains in 1880, the present surplus can not be greater than that figure. But that a

substantial surplus still exists in ordinary years there can, in our opinion, be no doubt."

Lord Curzon, when Viceroy, had occasion, in 1900 and 1901, to form an estimate of the average per capita income of the population. He said that in 1880, there were, in British India, 194 million acres under cultivation and in 1900, 217 millions, an increase parallel to the growth of population. In 1880 the yield per acre of food crops was, for calculation, taken at 730 lbs., and for 1898, 840 lbs., improved cultivation and extended irrigation accounting for this higher rate. Lord Curzon proceeded to say that on these calculations the average agricultural income in 1880 was Rs. 18 per head, and twenty years later, for the same area, the average was Rs. 20. Supposing that the non-agricultural income had increased at the same rate, the Viceroy concluded that the total per capita income was Rs. 30 in 1901, as against Rs. 27 in 1880. The increase, therefore, was Rs. 3 in twenty years !

101 Recent Statistics:—We shall now examine how the situation in India has developed during the past fifty years with respect to the quantity of food produced in the country and available to the people for consumption. It will be best to compile statistics relating to all food crops for different normal years. The production varies from year to year; and it is, therefore, necessary to take average figures. We find that the average yield assumed by the two Famine Commissions and by Lord Curzon is unduly high. It is only recently that careful crop cutting experiments and estimates of yield have been regularly made and even they are admittedly far from accurate and reliable. In such matters, however, approximation alone is possible, and the results are certainly valuable so far as they go. The character of the rainfall and other factors operate from district to district to introduce errors into the calculation, and these must not be ignored. The total area under food crops in British India, for instance, was 220 million acres in 1916–17, 189 millions in 1918–19, 197 millions in 1920–21, 215 millions in 1921–22 and about 227 millions in 1924–25. The statistics given by the Agricultural Commission also bring out these differences. The average yield assumed will not, again, materialize in several cases owing to one cause or another, but the errors will not, on the whole, seriously affect the conclusions as the field covered is simply enormous.

The following statement we have compiled will, we trust, be found instructive :—

Production of food grains and other food crops in British India.

Year.	Food Area Millions of Acres	Outturn Millions of Tons.	Outturn per acre lbs.	Outturn per head of population in lbs.	Population in Millions.
1878 ...	166·2	51·5	688	634	181
1898 ...	180·4	{ 56·0 * 68·0 *	{ 697* 836	514* 708	215
1902-1903 ...	192·5	60	700	580	232
1908-1909 ...	206·4	65	725	616	240
Average for quinquennium 1912-13 to 1916-17	213	71·3	750	642	242
Average for quinquennium 1917-18 to 1921-22	206	73·5	800	667	247
Average for quinquennium 1922-23 to 1926-27	210	76	810	665	256

* See pages 289-290 where the estimates of the Famine Commission of 1898 are referred to.

Sufficient allowance has been made for the consideration that owing to the increase in the irrigated area and the introduction of improvements, the average yield per acre must be pitched at a proportionately higher figure.[1] The official estimate of the average yield per acre of the principal crops in India is obviously defective, though it is undergoing steady improvement. The estimate is described as 'the average outturn of average soil in a year of average character, as deduced from the information obtained from experiments made up to the period under review.[2] It should be borne in mind, further, that extension of area shown as under crops may possibly represent a quantity of very inferior soil which must have comparatively low productivity and that a year of insufficient or unseasonable rainfall means a proportionately larger deficiency of yield than of the area shown. The following statement of the relation of the acreage and

1 Refer to an article by Mr. D. S. Dubey on "A study of the Indian Food problem" in The Agricultural Journal of India Vol XVI. Parts III, IV.

2 Refer to Appendix A of Agricultural Statistics of India, 1921-22 page 65 for an account of the system of making estimates of the yield of crops.

the yield of food crops in the Bombay Presidency for the three years, 1918–19 to 1920–21 will serve as a good illustration of the last point :—

Area under food crops (cereals and pulses only) and yield.

Year	Area in acres	Outturn in tons
1918–19	18,050,485	2,679,735
1919–20	23,250,118	5,874,842
1920–21	20,852,687	3,735,954
Annual average =	20·7 million =	4·03 million tons.
Average outturn per acre	=	435 lbs.
" " " head	=	448 lbs.

The three years 1923–24 to 1925–26 are slightly better, with an average area of 22 million acres and with an average outturn of 4·6 million tons per year. But as between the last two years of this latter period, we find that in 1925–26, "while the area under food grains in the Presidency fell only by 3·4 per cent., the outturn fell by as much as 17·1 per cent. below the previous year thus depicting the unfavourable character of the season under review over a large part of the Presidency."[1] A further illustration of this tendency is furnished by the fact that the yield per acre of the variety of cotton known as Oomrâs was only 50 lbs. in 1920–21 as against 104 lbs. in 1921–22, and the average for all varieties was 67 and 97 lbs. respectively. That our estimate of the yield in the comparative table given above, is sufficiently liberal, may be seen from the following facts. We take for the years 1927–28 the final and the estimated figures respectively for acreage and yield for rice and wheat which together cover more than one-half of the total for food crops. And the average yield per acre is 760 lbs.[2] The yield of the other crops is not so high and therefore our figure of 810 lbs. as the general average, is an over-estimate. But we make allowance for this in arriving at the final estimate below.

102 Supply Inadequate:—Variations from the standard average yield will be frequent in Provinces like Bombay where rainfall is inadequate or untimely and about only one-fourth of the total acreage under crops in British India is blessed with irrigation

1 Season and Crop Report, Bombay Presidency, 1925–26.
2 *Indian Trade Journal, 17th October, 19[illegible].*

and therefore an assured water supply. In several tracts, a bumper crop is an event of rare occurrence. The total outturn of food crops that has been so far calculated, is not, however, all available for public consumption. Various factors have to be allowed for in framing the final estimates. For instance, a small quantity out of the total is reserved and used as seed for the purpose of sowing. Then, there are the imports and exports between India and foreign countries and between British India and the Indian States. A considerable quantity is also used as food for cows, bullocks, buffaloes and horses and likewise animals like monkeys, pigs and deer and also birds take their share. Lastly, there is any amount of wastage due to the ravages of rats, vermin and grain diseases. The total average net export of food grains, mostly rice and wheat, which amounted to 4¼ million tons annually in pre-war years, has now declined to 2¾ million tons. About the same quantity is required for seed; and at a moderate estimate, the wastage and cattle consumption may each be taken at 10 per cent. of the total outturn. A further allowance must be made for the partial or complete failure of crops which occurs at least once in three to five years, and the loss attributable to this cause may be fairly put down at 10 million tons on the assumption that there are very good crops during fouf successive years and a total failure follows in the fifth. Making these deductions from the quantity of the outturn given in the statement above, we have a balance of about 45 million tons left for human consumption which is 400 lbs. per head of the population. On the assumption that the average of food requirements for each person,—man, woman and child,—is 1¼ lb. per day, which is certainly not an extravagant estimate, the quantity needed for the whole year and for the whole population of British India, will be about 50 million tons. But the quantity actually available is only 45 million tons and hence the deficit of about 5 million tons. It is needless to point out here that this shortage bears with exceptionally heavy pressure upon the poorer classes—those with small, uncertain incomes and with no land or with insufficient land—and means underfeeding.

It is possible that some of the estimates given above may be challenged as erring either on the side of excess or deficiency. But the outstanding fact can not be gainsaid that the relation between the food supply and the growing Indian population and its expand-

ing wants is not at all satisfactory. Mr. K. L. Datta's figures and views have been already noticed, and he is emphatic in his declaration that "population has increased by a larger percentage in the period under inquiry than either the total area under cultivation, or the area under food grains, or in other words, the requirements of food grains for internal consumption have increased in a larger proportion than the total production of food grains." The increase of numbers between 1881 and 1911, for instance, amounted to about 5 crores and it is necessary to realize what this means. As Mr. Archer[1] has pointed out, "this is just about the population of over-populated Japan, and it means that assuming the India of 1881 to have been just able to support herself, with very little over, a development of her resources, equivalent to the whole resources of Japan ought to have taken place in thirty years, if she was not to find herself sensibly poorer, per head of the population." India's progress, evidenced by her commercial and industrial statistics, can not certainly be taken to have amounted to these dimensions! A rough datailed estimate of the acreage, outturn and value of food crops for the year 1921-22 may be presented as follows :—

Production of Food Crops in British India.

Crop.	Million Acres.	Millions of Tons.	Crores of Rupees.
Rice	80	32	360
Wheat	22	8	148
Barley	7½	3	33
Jawar	24	8	102
Bajra	15	3	47
Ragi	4	1¾	24
Maize	6	2¾	38
Gram	15	4	63
Other food grains and pulses	30	10	112
Total food grains	203½	72½	932
Sugar	2¾	3	80
Other food crops	8	2½	40
Total food crops	214	78	1,052

1 India and the Future.

That these figures of area and yield are fairly normal, is demonstrated by statistics for later years. Rice and Wheat are India's leading food crops and are responsible, between them, for half the total acreage and half the total value of food crops, jawar, bajra and gram following them closely. In 1927-28, about 78 million acres were under rice and the yield was about 28 million tons. Corresponding figures for wheat were 32 million acres and 7¾ millions tons. The estimated figures for 1928-29 for rice were 82 million acres and 31½ million tons, and for wheat, 32 million acres and 8½ million tons.[1] This gives an average of 760 lbs. as the yield per acre, and we have assumed it to be 810 lbs. in the table on page 291 above As regards prices, they are much lower to-day than they were in 1921-22, and a deduction of about 10 per cent. from the total value given above, viz. Rs. 1,052 crores, will not be unreasonable. The final figures for the standard yield and value of food crops may therefore, be taken at 80 million tons and 950 crores of rupees.

If the diminished purchasing power of the rupee is taken into account and allowance is made for the very liberal estimate of the yield of crops made by Lord Curzon, it follows that whatever betterment has been caused by the extension of irrigation and agricultural improvements, is nearly counterbalanced by the increase in the population. In any case, there is no warrant for the supposition that a substantial advance has taken place in the economic condition of the bulk of the people. The only conclusion which it will be safe to draw is that the population has been growing up to the level of subsistence and somehow managing to exist on the same standard of living for a quarter of a century. We do not here consider the changes which are taking place in the distribution of the national income and the improvement that may have taken place in the purchasing power of certain sections of the population. Nor have we specifically considered the supply of milk and animal food, particularly fish, which supplements the ordinary means of subsistence of some castes and communities. The chief object of the inquiry has been to find out how the country stands with reference to food supply in general.

103 Famines :—Famines such as have harassed India so frequently, are now unknown in other civilized countries though at

1 *Indian Trade Journal, 17th October, 1929.*

one time they were equally common there. It is countries which are predominantly agricultural and backward in manufacturing activities that are subject to its occurrence from time to time.[1] A famine is a serious disturbance of the normal equilibrium between the supply of and demand for food. A complete failure of crops all over India is rare, though in the famines of the closing years of the last century the area covered was very wide. Defective means of communication obstructed the transport of food supplies from parts of the country where there was abundance to those which suffered from a shortage. Railways and good roads have now relieved this difficulty to a great extent. In advanced countries which have diverse industries, the deficiency can be made up by larger imports, as having the wherewithal to purchase food grains, they have the whole world to draw upon. Ireland, among them, perhaps furnishes a parallel to India. When the potato crop fails there, as it has done frequently, and employment is not available, severe famine conditions establish themselves. India has no diversity of industry; nor is she rich enough to buy large quantities of food from foreign countries, though in times of famine, exports of food grains stop and imports are stimulated. In western countries industrial depression and unemployment, which occasionally overtake the working classes, operate upon the latter like famines; but their consequences are not so serious as they are in India because their reserves and powers of resistance are much greater.

It has been said that Indian famines are not so much famines of food as famines of the means with which to purchase food. This is, to a large extent, true; since if the people of India had enough purchasing power, they would draw upon the resources of the outside world as England does. But for the impecunious and thriftless peasantry like that of an agricultural country like India, to import food grains from abroad with no reserves to fall back upon and no resources to give in exchange, is preposterous. And now, though the railways facilitate the transport of food grains from one part of the country where they are plentiful,

1 "To-day they are found only in the agricultural and mining industries. They are not as a rule very hurtful, except in countries industrially backward. A failure of the wheat crop may cause terrible famines in poor countries like India or Russia; and the insufficiency of certain raw materials may throw factories idle."—Gide: Political Economy.

to that in which the crops have failed, and to that extent the horrors of the calamity are minimised, a famine must always be a serious crisis of under-production, unemployment and abnormal prices. Fortunately the whole country is seldom overtaken by famine at the same time; and transport facilities, so vastly improved of late, give a large measure of relief. Like commercial crisis, scarcities and famines have a cyclic order in India. Not to go to the earlier famines, we may refer to the failure of the monsoon in the United Provinces in 1907. Besides the other evils it entailed upon the people, the famine was responsible for a deficiency in food production equivalent to an amount of grain sufficient to feed the 48 million inhabitants of the province for five months. The total loss on food crops at both harvests, in terms of money, was put at Rs. 42 crores while the total loss on other crops was about Rs. 15 crores. This will show the magnitude of the evil which frequently overtakes one part or another of this country and agricultural production has to be discounted to that extent. Hardly a year passes without its drought, scarcity or famine in one part of the country or another. And economic life in India, particularly of the agricultural classes, is a veritable gamble in rain. The uncertainty of the position breeds pessimism and fatalism and demoralizes the whole population.

104. Cause and Cure:—Famines and scarcity are, no doubt, caused by a failure of the rains and sometimes by floods; and Government has developed an elaborate system of preventive, protective and relief measures. It has minimised the danger of the loss of human life, and to a much less extent, also of cattle life. But as the Famine Commission of 1880 pointed out, no protective measures can be adequate which do not include some attempt to diversify forms of employment. The problem of production and population can not, therefore, be solved by these indirect methods, however useful they may be in themselvse. A bold frontal attack must be levelled at the evil and the productive capacity of the people must be raised. More capital, more varied and active industry, more work and greater efficiency and productivity with the resulting staying power are the essential conditions of success in the fight against famine.[1] Growing numbers, instead of adding to the aggregate output, diminish the individual share; and agriculture

1. See "Production in India" by Rajani Kanta Das.

is no longer able to support the population living on the soil. Work in towns alone now stands between the cultivator and starvation and that too on an exceedingly small scale. Specialization, concentration and mass production in anticipation of demand, create occasional unemployment in the west; and the doles paid by the State to lakhs of the unemployed in Great Britain under post-war conditions show the nature of the evil. Unemployment is wide-spread and chronic in this country.

The growing demand for the raw materials of India and the higher prices which some of them may often command, can not be regarded, from the point of view of food supply, as anything but an inadequate palliative. Of course, larger exports of cotton, jute, oil seeds and hides at higher prices do mean greater purchasing power and therefore larger production of wealth in the country. That is, however, a precarious source of wealth-creation and brings no direct freedom from liability to suffer from famine. If those raw materials are produced in larger quantities, if there is a steady improvement in their quality and if an increasing portion of them is manufactured in India with Indian labour and Indian capital and under Indian management, there will be more employment for workers of different grades and the addition to the national income will be enormous. And then only will it be possible to support the existing or a growing population with anything like decent means of subsistence.[1]

Famines, brought on by the cruel freaks of nature, can not be avoided. But they are not absolutely irresistible. Relief afforded by improved means of transport is not enough. The extension of irrigation and the spread of the co-operative credit movement are hopeful directions of development, and it is in such ways that the productive capacity of land and the people may be increased and the economic backbone of the nation may be strengthened. Land mortgage banks and the State institution of Tagai will

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1 "It may be more cheap to export raw goods and import manufactured goods. But if India is to win a stronger position as buyer and seller in the markets of the world, she must deepen the channels and regulate the action of her stream of produce......If the concentration of the agents of production on a great variety of undertakings is to prove advantageous, it must be on industries unaffected by drought. If the natural forces of international competition have not accomplished that aim then deliberate and determined action alone can achieve it."—Loveday: Indian Famines.

have systematically to advance capital to agriculturists for long terms to enable them to make improvements in land, such as embankments and wells; and the experiment recently started in the Bijapur district in this connection, deserves to be followed up with perseverance.[1] The effects of droughts and famines are cumulative and the destruction of cattle and the loss of agricultural produce caused by them take long to be made good. The heavy indebtedness of the cultivating classes in many parts of India is largely due to this cause. Mr. Caird, a member of the Famine Commission of 1880, was an independent observer and he remarked fifty years ago that the produce of the country, on an average of years, was barely sufficient to maintain the present population and make a saving for occasional famines. He held the view that 'there are more people every year to feed from land which, in many parts of India, is undergoing gradual deterioration.'[2] Add to this the facts that about one-seventh of our exports consist of food grains and that village stores of grain which were common in the past have almost disappeared. Cultivators are forced to sell their produce to meet a variety of pressing obligations and have usually to supplement the agricultural income by earnings as labourers and cartmen. Improved means of transport put more money into the pockets of a certain small class of rayats and landlords; but the average cultivator derives little benefit from high prices and there are no stores to draw upon in time of scarcity and famine. The food of the people has thus become less and its supply precarious.

The Famine Commission of 1880 laid its finger correctly on the root cause of famines, viz. 'the unfortunate circumstance that agriculture forms almost the sole occupation of the mass of the population', and stated that no remedy for present evils can be complete which does not include the introduction of a diversity of occupation, through which the surplus population may be drawn from agricultural pursuits and led to find the means of subsistence in manufactures or some such employments. The Commission made a number of very valuable recommendations in this direction, calling upon Government to initiate a policy of direct encouragement to

1 Evidence of the Collector of Bijapur before the Bombay Banking Enquiry Committee.

2 Memorandum on "Condition of India."

economic development. But practically no action was taken on them and after about forty years the same policy had to be urged upon the State by the Industrial Commission. What the mass of the people want is an unfailing and adequate supply of food and clothing; and their needs are simple and few. When, however, the majority are thrown out of work by a failure of rains, it means hardship and distress in the absence of grain reserves and staying power. It is easy to realize how grain stores are impracticable in view of the new system of rapid transport and brisk foreign trade during the harvest season and of the deficiency in the normal supply of food noticed in previous sections of this book. Grain and fodder stores must, if possible, be organized and encouraged. Promotion of capacity and facility to save in good years so as to enable the rayat to fall back upon the results of his thrift and the provision of supplementary occupations are the only effective remedies against scarcity and famine.

105. Unemployment.—The above discussion drives us irresistibly to the conclusion that without a diversity of industries and an enormous increase in its productive power, India can hardly maintain, even its present population, much less the steadily growing numbers. An increasing population must thrust the country deeper into the mire of poverty and misery. A steady growth of population in a country may be an indication of progress and prosperity. It may also be as much a cause as an effect of national poverty and decadence. The present standard of living of the mass of the people of India is very low, and the situation can not but strike all those who are anxious to see a substantial rise in it, as intolerable. Whatever progress is being made, will be just sufficient to overtake the normal growth of population. And what is wanted is a rapid improvement in the economic condition of the people which can be secured only by increased all-round efficiency.[1] The chief elementary

1 "A real increase of wealth and prosperity comes to nations as it does to individuals not from any reckless piling up of coined rupees—nor again from any rise of prices—which, as shown before, is in India almost invariably associated with crop-failures and famine conditions, but only from increase in industrial activity, energy and efficiency on the one side, and on the other, from increased productive employment of capital. With us, there is a deplorable deterioration in both respects."—Mr. Joshi's Writings and Speeches.

needs of the people are food, clothing and housing. As regards the first, it need not be repeated that though inequality in distribution is being corrected by improvement of the means of transport, the country, taken as a whole, does not produce a sufficient quantity of cereals and pulses. High prices of food grains benefit only a small section of landlords. Small cultivators, labourers and artisans are worse off on that account. Dearness of cloth retards progress towards a higher standard of living. If rayats' families produce yarn in their homes and also take to the weaving of cloth under the influence of the Charkha movement, a small addition will certainly be made to their purchasing power; but the general prosperity of cottage industries and the expansion of manufactures alone will bring satisfactory relief. Improved housing, likewise, depends upon an increase of the income of the agricultural population. High prices of raw cotton, sugar &c., increased the purchasing power of a few cultivators' families, for a time, and that is an item on the credit side of the economic account which must not be counterbalanced by equal debits. Unfortunately, however, the depression of the past few years, has almost wiped out this advantage.

The causes and nature of crises form an interesting subject of discussion in Economics, particularly owing to their frequency in modern highly complex and delicate conditions in respect of credit, mass production, competition and speculation. A famine in India is a crisis as it upsets the normal balance of prices, employment, trade and government revenue. But with us unemployment, indebtedness and poverty are chronic evils which are not short-lived like crises of the west. Middle-class unemployment has now become a serious menace, and it is mainly due to the lack of equilibrium between the supply of educated people and the demand for them. Administrative, professional and literary employment is restricted and there are no suitable avenues open to the youth of the middle class. Creation of work for these people means (1) expansion of industry, trade and banking, (2) their training for such occupations and (3) provision for their employment in them. This subject has been referred to in the last three chapters in appropriate places, and it need only be stated here that improvement in our educational system, the promotion of our industrial, commercial and banking organization and a vigorous national economic

policy directed to the bringing about of the proper and fruitful adjustment of the forces at work in the country, constitute the sole remedy for the evil of unemployment and discontent. Indian youth will more than earn their remuneration if they are given and utilise opportunities to increase the efficiency of the nation's economic life.

The gloomy picture presented in the above paragraphs[1] would lead one to ask why the problem should not be attacked from the end of population also. A restriction of the growth of population will have the same effect as an increase in the quantity of subsistence as a larger share of national income will be available for distribution. The average increase of population, meaning thereby the excess of births over deaths, is by no means high in India and does not exceed that in the United Kingdom and other western countries, France, of course, excepted. This figure is low not because the birth-rate is small as might be thought, but because both the birth-rate and the death-rate are comparatively high. A study of the statistics in this connection relating to the principal countries of the world discloses the fact that a high birth-rate is accompanied by a high death-rate, and the correspondence of the two rates illustrates the truth of the Malthusian doctrine. This state of things prevails in Rumania, Russia, Hungary, Saxony and Italy, and India stands in the same category with a birth6rate of 38 and a death-rate of 29 per thousand.[2] To take a typical case, the birth-rate in Germany per 1,000 was, in 1850–60, as high as 35·3; in 1929 it was only 18.3.; the death-rate has similarly come down during this period from 26·3 to 11·9 per thousand, the annual increase being thus reduced from 9 to 6·4. Even this increase of 6·4 per thousand is higher than the English (4·4), the Belgian (5·2), the Swedish (5·1) and above all, the French (1·6).

1 Sir William Hunter in his "England's Work in India" wrote thus :— "Two-fifths of the people of British India enjoy a prosperity unknown under native rule; other two-fifths earn a fair but diminishing subsistence but the remaining fifth or 40 millions, go through life on insufficient food. It is these under-fed 40 millions who form the problem of over-population in India."

2 "Here are countries in which the population is pressing on subsistence. It is trying to increase faster than the means of support make possible, and the positive check is in operation. Not the positive check in its extreme form; the birth-rate is not at its maximum; some limitation of births there is. But more children are born than can survive and become adults and more persons become adults than can survive to peaceful old age. The populations are ill-fed, ill-clad ill-housed, ill-warmed, ill-cared for in sickness."—Taussig: Principles of Economics.

But in Russia, Asia and South America, the corresponnding figures are many times higher.

106. Remedies:—The condition prevalent in the most backward countries are thus reproduced in India, and this country is a stock example, with economists, of a community on a low plain of material existence. If our birth-rate is high, our death-rate also is high. And a death-rate of 30 per thousand with heavy infant mortality, means waste of life, cares, anxieties, poverty, disease and distress. It will indeed be an ideal thing to be able to control disease and to conquer poverty. One of the difficulties in the way of the attainment of this end, however, is the steady growth of population itself, and if the death-rate is lowered by improvement of sanitation, the natural increase in numbers will be much greater unless it is directly controlled. In the face of the economic and the social situation as it exists and as it promises to exist for years to come, will it not, therefore, be desirable to check the birth-rate and thus relieve the pressure on subsistence?[1] This is the question which is sure to occur to many on a review of the whole position and they would recommend the application of the Malthusian remedy which consists in late marriage of both men and women with a view to the controlling of the number of childern; and the necessity and wholesomeness of marriage being admitted, the adoption of voluntary restraint in married life appeals to some people as the least objectionable form of deliberate limitation of population.

The progress of Eugenics and the study of sex problems is very active in the west to-day; and the lower birth-rate there reflects the result of the application of the new thought to actual life. The principles of biology and animal-breeding are being applied to the growth of human population. This is very important from the point of view of the maintenance of a healthy and vigorous community and the improvement of the race. The advocates of Neo-Malthusianism or birth-control are not, therefore, satisfied with late marriages and insist upon contraceptives being employed in order to prevent and regulate the brith of childern. The movement it severely condemned

1 "In all these countries an indispensable condition for a permanent improvement in the condition of the mass of the population is a lowering of the birth rate and relaxation of the pressure on the means of support."—Taussig: Principles of Economics.

on religious, moral, social and political grounds. Its rank individualism and selfishness are represented as anti-social, as destructive of the institution of family and as a menace to the very existence of the community and the state. Taxes on bachelors and special allowances to married people with families are illustrations of this feeling in western countries where state interference with individual liberty is universally resented and is still tolerated in the sphere of legislation about marriage. These considerations apply to the conditions of India within exceedingly narrow limits. It can not be doubted that here too, humanitarian feeling and solicitude for the welfare of children, if not of the whole nation, no less than personal ambition and a desire for independence and individual happiness, would justify the adoption of Neo-Malthusianism. The pathetic picture of a fairly intelligent and perhaps well-educated man, burdened with the anxieties of a large family, which is not a legacy of the past, at a loss to know how to keep the wolf from the door and reduced to desperate shifts, to arts of flattery, cunning and slavishness, provokes the reflection that these troubles are entirely self-imposed and could have been avoided. And this reflection does not fail to arise in the mind even of pious and conservative people when they see widowers of forty and fifty going in for their second and third marriages and preparing for misery for themselves, their widows and their children. This need of restricting the size of the family is equally present in the case of the working and other proper classes with whom the struggle for existence is very severe. And it is safe to agree to the proposition that "it is advisable that people should not bring children into the world, till they can see their way to giving them at least as good an education, both physical and mental, as they themselves had; and that it is best to marry moderately early provided there is sufficient self-control to keep the family within the requisite bounds without transgressing moral laws."[1]

To our mind, the most urgent and effective remedy, however, is for the State to inaugurate large schemes of national education, industrial development and social reconstruction. The uplift of the people from ignorance, apathy and degradation, will alone bring about the desired improvement, and the application of the Neo-Malthusian remedy is only a counsel of perfection at the present stage of the

1 Marshall; Economics of Industry.

social evolution[1] of the country. Late marriages which are now becoming more common as a result of the spread of education and new ideas, as well as of the pinch of economic pressure, do not, by themselves, put a limit on the number of children. Such marriages are not essentially less productive than those contracted at an early age. As to the control of births, it may operate to some extent and will assuredly come at later stages of national progress. But it should not be forgotten that Indian poverty is not due to over-population, but is the result of under-production. Other nations have been increasing as fast as the Indian people, and even faster, but their command over the means of subsistence has grown at a faster rate. This is the real key to the solution of the Indian problem of population, and points to the need of adjustment in the present state of the country's economic transition.

107. Indian Attitude:—The artificial remedies of Neo-Malthusianism, the up-to-date methods of birth-control in particular, are sure to shock the average Indian mind much more than it does the European mind, even at the present day. People in the West appear to have resigned themselves to the not altogether welcome situation created by the new-fangled forms of married and single life and birth-control by means of contraceptives. Like their forbears, Hindu law-givers looked, and rightly looked, upon marriage as a necessary social institution and a sacrament. Perpetuation of the race is a sacred duty and every man has to redeem the debt he owes to his father by leaving a son after him. Late marriage is prescribed in the ancient Hindu system in the case of men, but the performance of the religious duties of the house holder makes the married state absolutely essential. Early marriages which are universal in India to-day are a departure from the wholesome practice of olden times. The injunctions recorded in the works of Hindu law-givers, show that they laid down rules for a society which required for its existence and progress, a growing population of vigorous, healthy men; and to shirk married life would have been regarded as shirking a sacred duty to the commmu-

1 "India is one of the countries in an intermediate stage as regards the process of population growth. She has abandoned—or more or less abandoned—the old-fashioned methods of limiting population to an optimum, viz., periodic abstention from intercourse, abortion and infanticide and she has not yet adopted the methods of advanced countries viz. postponement of marriage and voluntary birth control. She is at a point where her population is controlled by disease and disease only."—Census Report, 1921, page 49.

nity. Prayers were and are offered to God for the grant of healthy and vigorous progeny; and this attitude on marriage and the householder's life finds a justification in the attempts now being made in western countries to encourage marriages, to reward large families and to penalize bachelors. Love of children is instinctive in the human race and the dislike for families which is growing in the west, has not met with general approval even there. The complaint is frequently heard that modern women are being unsexed owing to their effort to imitate and emulate men in masculine pursuits and pastimes; and the danger of race suicide is not altogether a product of the imagination. In India both Hindus and Musalmans regard marriage as obligatory. It is a curious fact that the Hindu philosophy of Sanyas or renunciation has not discouraged the institution of marriage and it is interesting to notice that this restrictive influence is claimed for Christianity which is stated to have made celibacy for the first time in human history a factor of importance. The tendency to refrain from marriage altogether witnessed in Europe is attributed in part to the teaching of Christian churches.[1]

The anxiety of the average Hindu, man and woman, to have a son[2] and the shifts to which he or she is reduced in trying to secure one, have been objects of ridicule and amusement with certain authors. There is no doubt about the fact that under the influence of formal religion and custom, institutions based upon real necessity and sound principles are in practice abused and perverted or are retained in the original forms though the latter are unsuited to changed conditions. The religious arguments urged against the amendment of the law of divorce in England are instructive in this connection; and the opposition of the Christian Church to social reform of this nature is well-known. We have suggested above the true explanation of this Hindu passion to procure a son; and critical

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1 See Census Report, page 154.

2 "In the adoption of a son the Hindu aimed and still aims at satisfying an exacting group of manes greedy in the other world for recognition and offerings in this. *He looks too for appreciable benefits which he is himself to derive from* the future ceremonies the fruit of which will reach him in the realm of shades...... In somehow acquiring a son the Hindu thinks generally that he is making the best of all possible bargains for himself in this world and the one to come."—West and Buhler: A Digest of the Hindu Law.

students of Hindu law and usage have not failed to appreciate it.[1] Marriage was as much an economic and a national as a moral necessity and it came to be the parents' duty to equip the son with a partner in life as well as the means of earning a livelihood. It is not correct to lay the whole blame of Indian poverty at the door of the fecundity of the Indian people and the Hindu love of offspring. Political conditions and economic disturbances must share the responsibility for the result with other causes. The wife is the partner of her husband not only in religious rites but in his economic functions. She co-operates with and assists him in his work on the farm and in the factory, besides managing the household which, by itself, is a valuable economic asset. The children, particularly the boys, supplement their parents' labour and earnings. A wifeless and a childless man is comparatively weak and helpless. Male offspring was calculated to continue the family and maintain ancestral estates while daughters passed to other families and were comparatively in disfavour particularly as it was not easy to find suitable bridegrooms for them.[2]

108. Changed Conditions:—But times have changed, and with them must change individual ideas and social laws and customs. The struggle for existence, the spread of education and the movement of social reform are steadily pushing up the marriageable age of girls as well as of boys. Parents can no longer support growing sons with their wives and perhaps also their children, particularly among the educated classes who find the burden of bringing them up rather heavy. Early marriage is, however, still looked upon as a sign of high social status and is also a religious necessity. In fact, early marriages of males are entirely opposed to the rule of *Brahma-*

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1 "In modern times children are a luxury to the rich, an encumbrance to the poor. In early ages female offspring stood in the same position, but male issue was passionately prized. The very existence of a tribe, surrounded by enemies, would depend upon the continual multiplication of its males. The sonless father would find himself without protection or support in sickness or old age and would see his land passing into other hands when he became unable to cultivate it. The necessity for male off-spring extended in the case of the Aryan even beyond this world."—J. D. Mayne : Hindu Law and Usage.

2 Students of sociology will easily appreciate this explanation as applying to the evolution of human society in general. See Wester-mark : "The History of Human Marriage."

charya strongly insisted on by the ancient law-givers.[1] And whatever objection may be raised on religious grounds to the postponement of the marriages of girls, there is nothing to prevent wholesome restraints in married life being practised. Such moral restraints are clearly implied in some of the old restrictions imposed by wholesome custom on the relations of married people. Though it may be a little difficult to establish the fact, the average expectation of life in this country appears to have declined a good deal and the strain of the modern struggle for existence is responsible for it. The same remark may be safely made with regard to the health of the average Indian. In these circumstances, it becomes a duty of men and women in India to see that the nation has a healthy and vigorous population such as will stand comparison with other races and will not go under in international competition.

To a Hindu, marriage and the begetting of a son, is a duty which he owes to society and the pining of women and men for male offspring in India presents a sharp contrast to the indifference displayed in that respect by advanced sections of western communities. But it is sorely to misunderstand the spirit of the ancient law and practice to suppose that they impose upon the householder the duty of begetting children for whom he can not hope to provide and that a limitation of the family by the exercise of prudence would violate the injunction of religion and dictates of morality. Speaking of the division of inheritance, Manu says:—"By the eldest as soon born, a man becomes father of male issue and is exonerated from debt to his ancestors: such a son, therefore, is entitled to take heritage. That son alone on whom he devolves his debt and through whom he tastes immortality was begotten from a sense of duty; others are considered as begotten from love of pleasure."[2] The system of the four Ashramas also supports the view advanced above.

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1 त्रिंशद्वर्षो वहेत्कन्यां हृद्यां द्वादशवार्षिकीम् ।
त्र्यष्टवर्षोऽष्टवर्षां वा धर्मे सीदति सत्वरः ॥—Manu, IX, 94.

2 ज्येष्ठेन जातमात्रेण पुत्री भवति मानवः ।
पितृणामनृणंश्चैव स तस्मात्सर्वमर्हति ॥
यस्मिन्नृणं संनयति येनचानन्त्यमश्नुते ।
स एव धर्मजः पुत्रः कामजानितरान्विदुः ॥—Manu, IX, 106-107.

If it was 'the sense of duty' to ancestors and to society which animated ancient laws with regard to marriage and progeny, may not the same sense of social duty be pleaded in favour of a limitation of families to-day? 'Love of pleasure,' Manu speaks of, or blindness to the future, brings on misery to the individual and to society, and moral restraint which religion and reason insist upon, is calculated to make for health, wealth and happiness.[1] Hindu law-givers had a certain condition of society in view when they laid down their precepts. Restrictions as to *Gotra* and caste in the selection of the bride and the bride-groom were similarly animated by eugenic purposes. Modern economic conditions and ideals may require a modification of those rules. Changes in circumstances and ideas demand changes in social laws and individual conduct. Social reformers seek to encourage late marriages, to remove restrictions on the marriage of widows and to stop polygamy, and it may be noted that the suspension of reproductive activity is actually advocated as a means for promoting rapid national development. A low or declining birth-rate accompanied by a low death rate, is regarded as a sign of advancing civilization, and it is believed that the lower the birth rate, the better is the state of a nation.[2] The

1 Malthus himself quotes in his 'Essay on the Principle of Population, (Chapter XI), passages from Manu and points out various circumstances which, in his opinion, must have operated in India as preventive checks to population. He says :—'From all these circumstances combined, it seems probable that among the checks to populations in India the preventive check would have its share; but from the prevailing habits and opinions of the people there is reason to believe that the tendency to early marriages was still always predominant and in general prompted every person to enter into this state who could look forward to the slightest chance of being able to maintain a family.'

2 "The general decline of the birth-rate in advancing countries; the accentuation of that decline among the well-to-do; the probability, almost certainty, that with wider diffusion of prosperity the tendency will spread more and more to all classes—at times is due to social and industrial ambition. Some writers have discussed the change as if it were automatic, as if the lower birth-rate among the well-to-do were the natural and necessary consequence of their having a large income. The connection between income and birth-rate is the other way; rising prosperity is rather the effect than the cause of declining pressure. The fundamental cause is the wish of each family to promote its own material welfare."—Taussig: Principles of Economics.

present tendency in western countries is towards a steady limitation of families and growing material prosperity. The size of the individual and family share of the national dividend is determined by the number of persons among whom it is to be divided as much as by the amount available for distribution. The problem will, therefore, be more effectively solved if it is attacked from both sides simultaneously.

109 Vicious Circle :—The futility of expecting the preventive checks to operate on the national birth-rate in India will be obvious on a little reflection, and it will be perceived that here we seem to move in a vicious circle. The birth-rate goes down where economic conditions are satisfactory and the intellectual and educational level is high; and a low birth-rate is required to improve the economic condition of the community. Prof. Taussig observes that the causes of the declining birth-rate are to be found in "the intellectual and material forces which have so wonderfully stirred the people of western Europe during the last century: the spread of education, newspapers and books; cheap movements by railway and steamship; the stirring of stagnant population by the new modes of employment, by large-scale production and the factory system, by the changes through emigration."[1] Unless then the stagnant population of India is educated and stirred and unless new modes of employment and methods of production and consumption are adopted, how is the birth-rate in this country going to be checked? By a handful of educated enthusiasts practising birth-control? And will it not be much better if national efforts are directed chiefly towards the creation of those conditions which hold the propensity to multiplication in check while preventive and restrictive measures are left to be employed by the few persons who understand and can use them?

These questions are suggested by the existing economic, political and social conditions in India. The aboriginal tribes are the most prolific races in this country. The prolificness of the Mahomedans who have, like the former, few widows in the reproductive age periods, is greater than that of the Hindus. It must be greater among the lower and poorer classes than among the higher.

1 Principles of Economics.

The exhortation, therefore, addressed to the people that instead of allowing the hand of death to limit the population to the means of subsistence, they should keep it under control and cultivate the habit of cutting their coat according to the cloth that is available to them, is bound to prove infructuous in India where, of the total population of the country, only 82 out of every 1,000 persons exclusive of children under five years of age are literate, in the sense of being able to write a letter to a friend and to read the reply, and the literacy is divided very unequally between the two sexes, only 21 females per thousand being able to write against 139 males per mille. In a country where people will resist inoculation against epidemics like plague in spite of its utility in saving life demonstrated by thirty years' experience and where legistation like the Sharda bill fixing the age of marriage and of consent even at a low level, is passed with the greatest difficulty, the prospects for birth-control are hopelessly slight. With 90 per cent. of the population not knowing how to read and write, with an average income of Rs. 40 per head of the population, in the lower strata of society, and with about Rs. 20 of per capita foreign trade, it is not possible that the causes which have brought down the birth-rate in western countries should operate in India for many a year to come.

The small class of the well-to-do and the educated people who are a minute section of the population and who are brought under foreign influences or feel the strain of the struggle for existence most, may indeed exercise the moral check to their advantage, but that will not appreciably affect the national birth-rate. The generally high birth-rate in India is attributed to the large proportion of married women, and this is not likly to be changed for years. It is futile to raise the marriageable age of boys only, and it is difficult to raise the age in the case of girls. Early marriage is associated with higher social status and certain castes deliberately favour it. And this state of things is changing for the better but slowly. We have shown above that though the birth-rate in India is very high, the excess of births is small, not more than about 6 to 9 per thousand. While, therefore, the application of the Malthusian principle seems to be called for, there is a bitter complaint about race suicide among the Hindus, at any rate, of certain provinces. The increase among Mahomedans and Christians is much higher than among the Hindus, and this fact is causing anxiety to many. The

following figures show the movement of the two communities since 1911 and 1881 in the principal Provinces :—

Province	Increase per cent. since			
	1911		1881	
	Hindu	Musalman	Hindu	Musalman
Assam ...	+13·6	+16·7	+34·1	+67·1
Bengal ...	— ·6	+ 5·1	+17·6	+41·1
Bihar and Orissa ...	— ·4	+ .6	+13·8	+ 1·8
C. P. and Berar ...	+ 2·5	— ·5	+17·0	+21·5
Madras ...	+ 1·8	+ 3·6	+18·1	+31·5
Punjab ...	+ 4·5	+ 4·7	+ ·1	+28·7
United Provinces ...	— 2·0	— 2·6	+ 2·4	+ 9·1

The difference in the rate of increase is not satisfactorily accounted for by conversions alone. According to the latest census report, the death-rate is distinctly in favour of Mahomedans as against the Hindus, and the comparatively small increase in the number of the latter is attributed, among other causes, to the peculiar social customs of the Hindus such as child marriage and prohibition against widow marriages. The high rate of infant mortality, which is 400 per thousand of infants in the first year, compared to 100 in western countries, also keeps down the natural increase.[1] It is an interesting phenomenon that the fecundity of marriages is not high in India compared with that in England, for instance, in spite of the universality of marriage and early marriages in this country. The births per thousand of females of reproductive ages (15–45) in England and Wales calculated on the figures of the census of 1911, were 98 as against 128 in India. But if births are calculated on the number of married

1 'The moral of all these facts is plain. The Hindus are not a dying race, but surely they are on that track. Fortunately, its causes are perfectly plain. They have to thank their own social customs, which, as we shall see later on, are ruining them in several other ways too. In spite of Muslim rule for over a thousand years, the Hindus formed 80 per cent. of the population of this country in 1870 but now they are not even 70, and the decimation comes this time from within and not from without—surely a harder foe to combat. The momentous question is 'Are we to remain indifferent in the face of this crisis.'?—M. S. Kamath : The Census of India.

females of these ages, and not on the total number of females between 15 and 45, the Indian figure stands at 160 against 196, the figure for England.[1] It will, therefore, have been observed that a high marriage rate does not necessarily mean a high birth-rate, nor do late marriages of women signify a lower rate of child-bearing. Similarly an increase in population e. g. excess of births over deaths does not always connote a *growth* of population.[2]

110. Conclusion:—Is India over-populated? The answer is both 'yes' and 'no.' With its present standard of living and industrial efficiency and numbers, the country is over-populated, but if the productive capacity of the people for the improvement of which there is considerable scope, increases, they can be maintained at a higher level of living and mere numbers will be of no consequence. Over-population is a term which must be understood in a relative sense; and whether a given population may be maintained in comfort, will depend upon its power of wealth-creation. As a fertile piece of land will feed more mouths than a sandy one, a community of industrious persons will produce a larger quantity of food and other forms of wealth than one of lazy people. A low standard of living will likewise enable a larger number to be supported than a high one. A growing population must have a proportionately increasing quantity of subsistence if its standard of living is not to be lowered. A community must, therefore, produce more to keep pace with the increase in its numbers. An increase in numbers often means an augmentation of the productive capacity of the community and is, therefore, not an object of anxiety. But the law of diminishing returns will come into operation when a certain stage of increase is reached and the result will be deterioration and misery.

Natural increase of population, in itself, is not a sign either of progress or of decay. It is checked by diseases, famines and wars, or its growth may be limited by human prudence and moral restraints. Under favourable conditions neither the positive nor the preventive checks may be called into operation and a vigorous population will produce more wealth than is absolutely necessary to support it. If the pinch of increase is felt, internal migration and emigration will be resorted to and the pressure will be relieved; and

1 P. K. Wattal: The Population Problem in India.

2 See Appendix to this Chapter.

better organized and more efficient methods of production and distribution will have the same ameliorating effect. Ambition, foresight, the desire for independence and absorption in intellectual pursuits will lead people to postpone or avoid marriages and to regulate and restrict offspring, and the number of children brought into the world will tend to become smaller in a community where such persons form a large proportion of the population. This is exactly what is happening in the west to-day.

It appears that in India two or three generations ago, as in earlier centuries, the means of subsistence were ample in comparison with the population, of course according to the prevailing standard of living, among the different classes of the population. Positive checks in the form of war, famine and disease were also largely in operation and therefore the pressure of population was not felt. With the establishment of peace and steady government, under British rule, however, a gradual increase in numbers began which was checked only by famines and diseases. The increase was not accompanied by a proportionate augmentation of the productive power of the people, and indigenous industries having declined in the meanwhile, the effects of over-population began to be felt. With the increased demand for India's raw materials, a more equalised distribution and the consequent rise in prices, things wore a promising aspect for some time. But this could not be enough to meet the requirements of a growing population much less to raise its standard of living.

The problem may be solved by emigration and internal migration. But scope for this is limited. Indians are not treated well in the Dominions and the Colonies, in some of which the door is slammed in their faces. Many Indians go to Ceylon, the Malay States and to other countries as coolies and thus relieve the pressure of numbers. Internal migration is possible, to a certain extent, from thickly populated districts to tracts where population is sparce. Immigration into Bengal and Assam from neighbouring provinces is a noteworthy fact. Land which is not cultivated or which is not properly cultivated, may be made to yield a larger quantity of food. But the most efficacious remedy is to enhance the productive power of the soil all over the country and the creation and expansion of a variety of industries. There are indeed serious difficulties in the way, but this is the direction which the efforts of the State and

the public must take. We, therefore, ultimately come to this that the pressure of population on the means of subsistence can be relieved only by the spread of education, an improvement in all-round efficiency and by a more efficient organization of production. The prospect in the immediate future is not, therefore, bright unless action is taken along lines indicated in the various chapters of this book. What is required is a national awakening to the seriousness of the situation and a national policy suited to the needs of the country. As to moral checks to population, they would prove useful to a limited extent wherever they can be exercised in an intelligent and responsible manner. While we are not opposed to birth-control merely because it is a novelty or a western fad, it appears to us necessary before recommending it, to consider seriously the far-reaching effects it is likely to produce on the moral, mental and physical health of the people and their social institutions.

In India, though the actual excess of births over deaths is not very large, both the birth-rate and the death-rate are high.[1] Postponement of marriage and conscious limitation of the numbers of children in families are the preventive restraints suggested by Malthus and advocated by his followers, which have succeeded in keeping down the growth of population in western countries. The full effects of the practice of birth-control on morals, culture and national efficiency are not yet known; and its whole-sale adoption can not be recommended in India. Whatever its theoretical merits and practical benefits to individuals, the remedy can be only adopted by intelligent and educated people and the masses can not be expected to resort to it. It is not fair to ridicule the latter and to place the country's poverty at their door. As enlightenment spreads, the rate of growth declines and the increase takes place only among the lower classes. It is these people, we are told, who need relief most, and liberation from forced motherhood is recommended for the women of these classes. The

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1 "Broadly speaking, the actual checks to population in China, India, and many other parts of the world are still those so well described by Malthus. In India, it is true, British rule has abolished civil war, and the total population has increased very rapidly during the last century as railways, irrigation works and other modern innovations have added to the productive capacity of the country. But famine is still lamentably frequent, and in spite of industrial progress it would seem to be true that the population readily rises up to the limits of the means of subsistence"—W. T. Layton: *Introduction to An Essay on population by Malthus.*

Neo-Malthusian devices are not, however, fool-proof, and are not likely, in the near future, to be employed in such a way as to produce any appreciable effect upon the natural growth of population in India. In the Appendix to this chapter will be found statistics illustrating the different aspects of the problem of population in India as also a summary of the views of various thinkers with regard to conditions in western countries. The Appendix will be found useful by advanced students and others who are desirous of studying the subject more closely.

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APPENDIX

THE POPULATION PROBLEM.

Some Facts and Arguments

1 Since the question of population and of birth-control has been attracting increasing attention in India, we feel it necessary, even at the risk of repetition, to refer again to some of the facts and arguments which find prominence in the discussion of the problem and a knowledge of which is calculated to prove useful in understanding it. The number of marriages per one thousand inhabitants in European countries stands between 6 and 8. The birth rate (children born alive) in *Europe* was as *high as* in India in the last century, but has steadily declined. The decline in the death-rate is equally remarkable as will be seen from the following table of deaths per thousand:—

Years:	1851-60	1871-80	1891-1900	1911-13
Germany ...	26.4	27·2	27.2	16.0
Austria ...	30.8	31·5	26.6	21.4
France ...	23.9	23·6	21·5	18.3
England and Wales ...	22.2	21.4	18.2	13 9
Belgium ...	23.6	22.9	19.1	14.8
Netherlands ...	25.6	24.3	18.3	13.0
Denmark ...	20.6	19.4	17.4	13.3
Sweden ...	21.7	18.2	16.3	13.7
Norway ...	17.1	17.0	16.1	13.2

2 The proportion of the population at various ages is important from the economic point of view and depends on the birth and death rates and also on migrations. The relative numbers of males and females have a similar significance. The following figures for births and deaths in Germany are typical of population developments in leading European countries :—

Germany (For 1,000 inhabitants.)

Average	Births	Deaths	Excess of births.
1872-80	41.19	28.54	12.65
1881-1890	38.20	26.50	11.69
1891-1900	37.34	23.49	13.85
1901-1910	34.02	19.74	14.28
1904-1913	30.92	17.4	13.5
1922-1926	20.9	12.8	8.1

(year 1910).

	Births	Deaths	Excess of births
Denmark	27.5	12.9	14.6
Germany	29.8	16.2	13.6
Bulgaria	40.3	26.4	13.9

Excess of Births over Deaths per 1,000.

Years	Germany	England and Wales.	Norway	Belgium
1871–75	10.8	13.5	12.6	8.3
1886–90	12.1	12.5	13.6	9.0
1901–05	14.5	12.1	14.1	8.7
1911–13	12.1	10.2	12.2	8.2

3 While the lower death rate is due to growing prosperity and improved sanitary and hygienic conditions, the lower birth rate has been brought about by (1) higher cost of living and a severe struggle for existence, (2) increased competition in various occupations, (3) growing expenses of bringing up children and (4) people's desire for individual liberty, particularly on the part of women, and their love of independence and social status and parents' anxiety to make better provision for children.[1] In Germany, as in the other progressive countries of the West, therefore, the lower birth-rate is the direct result of the adoption of Neo-Malthusian methods. This regulation of births has now overtaken even rural areas, the rate in Germany having declined from 39 per thousand in the quinquennium 1885–90 to 31.6 in the five years 1911–14. The total number of births in that country is to-day 25 per cent. less than before the war, and the number in 1926 was 13 lakhs as against 17 lakhs, the annual average for the years 1911–13. The German fecundity of marriage has gone down 60 per cent. between 1880 and 1924 and now approaches the French. Political parties in Germany make it a plank in their election programme to promise to secure the repeal of the penal law against the procuring of miscarriage; and the knowledge of the technique and the appliances for preventing motherhood is becoming common in urban areas there.

4 Infant mortality has been reduced in Germany from 15 per cent. of all infants born in 1913 to 10.5 per cent. in 1925. The total mortality has gone down from 1.5 per cent. in 1913 to 1.17 per cent. in 1926. Expectation of life has gone up from 35½ years in 1871–80 to 47½ in 1910–11, while in India, it is only about 23.

5 The effect of the tendency of the birth and death rates to decline is the important change which has taken place in the constitution of society with

repect to numbers of the people at different ages. On an average, the German nation is to-day older than what it was, and the centre of gravity is shifted to ages of productive activity. This is an advantage for the moment, but in the course of a generation, the number of persons capable of work will be reduced and that of old men over 65, will increase. The apex of the population pyramid will be wider and its basis will be narrower. The national, economic and cultural consequences of this contingency to Germany are obvious.[1].

6 Human will plays, in the growth of population, such a decisive part that the economic relation between the law of diminishing returns and physiological possibilities is profoundly affected by it. Certain psychic factors come into play here, which are not exactly either the moral restraints or the positive checks of Malthus. It is not the number of marriages but rather the refusal to bear children, that is of significance in the increase of population. Nauman says that "Neo-Malthusian nations are doomed to downfall." Nor can the Neo-Malthusian remedy prevent the evils against which the safeguard is sought. Moral barbarism leads to the weakening of productive energy; and though population ceases to grow, its supply of wealth may be reduced in greater proportion. The much-praised Eugenics or Race-hygiene is not of such practical importance as its enthusiastic supporters would have us believe. It is false to assume that increase of population threatens the physical and moral well-being of the lower classes more than that of the higher orders. The will to live in a poor man is extraordinarily strong and the finest virtues grow out of it.[2] This last observation of Steffen Reynold, an Englishman, may strike one as an unduly wide generalization; but it contains an important element of truth. The narrowing of the basis of the pyramid of population as a result of a decrease in the birth-rate, is referred to by Dr. Burgdorfer who deplores the tendency towards the restriction of the size of families, as a menace to the prosperity of agriculture and Germany as a nation.[3] The orthodox Christian view that birth-control is calculated to sap the foundations of morals and essential social institutions like marriage and family, is supported by H. Pesch who says: "Take care of the quality of population and leave the quantity to itself as being unimportant."

7 The advocates of birth-control support their case on the ground of humanitarian as well as national considerations. The output of their literature is ever on the increase; and questions relating to short-term and trial marriages, sex-relations, prevention of motherhood, divorce, the law concerning abortion &c. are being actively discussed. It is stated that large increases

1 Dr. Goetz Briefs: "Bevolkerungsbewegung und Arbeitsmarktentwicklung" in "Strucktuwandlungen der Deutschen Volkswirtschaft", edited by B. Harms.

2 Adolf Weber: "Allgemeine Volkswirtschaftslehre."

3 "Deutsches Bauerntum"—Heft 2: "Bauer, Staat und Volk."

of population in backward countries are a menace to the people of the West whose standard of living they threaten by competition.[1] Human civilization requires birth-control for its very existence. There is the subjective side of the picture also. Is woman to be regarded as a child-producing machine, ever suffering pain and getting weak with every child born? Is man to go on sweating, earning more and working harder simply for finding food for the growing family? What will the world gain by increasing numbers? Will culture, freedom and subsistence grow when each woman brings forth six children?[2] The appliances of birth control are quite scientific and safe, and the mass of the people have to be educated in their use.[3] There is nothing immoral in birth-control. On the contrary, it is an essential duty towards children, mothers and humanity; and individuals and the community ought not to shirk it on pseudo religious and false moral grounds.

8. The opposite views on marriage and birth-control, held by Protestants and Catholics are instructively brought out in two articles which recently appeared in the *Forum*, extracts from which we take from the Bombay *Week* below:—"The writer holds that according to the teaching of the Church, 'one marries to beget children', the happiness of the couple being only incidental and not to be allowed to come in the way of having children-many children. Hence the condemnation of birth-control by the Church. The writer thinks that birth control is indispensable 'under present social and economic conditions,' and that by her condemnation of birth control—except by way of self-control and continence—, the Church is inflicting great misery on married homes".

"What really troubles them, I think, is that having children apparently is coming to be regarded as an entirely animal process, selective and occasional; and that the spiritual factor has disappeared. Now if this were true, why marry? Make procreation a state function, as the extreme Communists contend. To continue reasoning in this strain, every argument of economics is in favour of large families, for they will provide cheap labour, more farm hands, and increased distributional outlets. Are these statements cynical and materialistic? No more so than the aim of the Brush Foundation for Birth Control at Cleveland, Ohio—"*to contribute to the betterment of the human stock, and to the regulation of the increase of population, to the end that children shall be begotten only under conditions which make* possible a heritage of physical health and a favorable environment." Animal husbandry agencies have said the same, in slightly less lofty words, concerning the improvement of Holsteins and Durocs."

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1 See "Sozialistische Monatshefte."

2 Article on "Geburten Kontrolle" in "Das Tage Buch" for 14th Sept. 1929.

3 See works of Margaret Sanger and Mary Stopes.

Indian Population Statistics

I

Towns and Villages Classified according to Census of 1921.

Class.	India		Provinces		States	
	No.	Population.	No.	Population.	No.	Population.
Under 500 inhabitants	517,036	95,983,313	364,138	69,541,218	152,898	26,442,095
500–1,000 ,,	105,017	73,008,797	82,205	57,341,789	22,752	15,667,308
1,000–2,000 ,,	47,242	64,296,223	38,313	52,212,170	8,929	12,084,053
2,000–5,000 ,,	15,965	45,085,217	13,195	37,374,593	2,770	7,710,678
5,000-10,000 ,,	1,871	12,428,336	1,500	9,902,639	371	2,525,697
10,000-20,000 ,,	517	6,996,301	401	5,443,433	116	1,552,868
20,000-50,000 ,,	198	5,866,532	158	4,694,815	40	1,171,717
50,000-1,00,000,,	55	3,609,189	43	2,688,054	12	921,135
1,00,000 & over ,,	34	8,053,124	29	7,156,078	5	897,046
Encampments and population unclassed	...	690,665	...	549,211	...	141,454
Area in which village statistics are not recorded	46	2,924,729	46	99,593	...	2,825,136
Total. ...	687,981	318,942,480	500,088	247,003,293	187,893	71,939,187

II

Distribution of Population by main Provinces according to sex and civil condition.

Province	Sex	Civil condition			Total population
		Unmarried	Married	Widowed	
		(Lakhs)	(Lakhs)	(Lakhs)	(Lakhs)
Madras	Males ...	110·8	88·6	9·1	208·7
	Females...	79·9	94 0	40·4	214·4
Bombay	Males ...	48·9	45·9	6·9	101·7
	Females...	30·5	44·3	16·8	91·7
Bengal	Males ...	125·1	107·3	9·0	241·5
	Females...	77·2	103·7	44·4	225·4
U. P.	Males ...	107·6	108·5	21·7	237·8
	Females...	68·6	109·8	37·4	215·8
Punjab	Males ...	61·1	42·1	9·7	113·0
	Females...	38·4	43·0	12·3	93·7
Burma	Males ...	37·6	26·2	3·4	67·5
	Females...	32·7	24·2	7·3	64·5
Bihar and Orissa	Males ...	74·4	82·7	10·5	167·6
	Females...	54·6	85·6	32·1	172·3
C. P. and Berar	Males ...	30·9	34·2	4·6	69·5
	Females...	23·0	34·9	11·5	69·6
Assam	Males ...	22·0	15·5	2·4	39·6
	Females...	15·5	15·1	5·7	36·4
N. W. F. Province	Males ...	7·0	4·6	·6	12·2
	Females...	4·4	4·5	1·1	10·2
Total, British Provinces	Males ...	629·2	559·1	78·2	1268·7
	Females...	427·2	562·0	210·3	1201·3

III

Distribution of Population according to Residence and Education.

(BRITISH PROVINCES)

Province	Males.			
	Total Population	Illiterate	Literate	Literate in English
Madras ...	20,870,749	17,702,676	3,168,073	354,594
Bombay ...	10,176,969	8,746,402	1,430,567	230,777
Bengal ...	24,151,222	20,300,571	3,850,651	728,441
United Provinces ...	23,787,745	22,231,119	1,556,626	156,900
Punjab ...	11,306,265	10,550,921	755,344	128,242
Burma ...	6,756,969	3,709,170	3,026,337	92,207
Bihar and Orissa ...	16,763,866	15,281,315	1,482,551	123,915
Central Provinces and Berar ...	6,951,399	6,367,771	583,628	56,612
Assam ...	3,961,100	3,523,715	437,394	67,253
North-West Frontier Province ...	1,229,316	1,151,232	78,084	15,857
Baluchistan ...	255,014	227,181	27,833	8,330
Ajmer-Merwara ...	269,569	224,908	44,658	8,792
Coorg ...	89,501	72,542	16,959	2,389
Delhi ...	281,633	236,244	45,389	14,271
Andamans and Nicobars ...	20,793	15,687	4,606	613
Total British Provinces ...	126,872,116	110,341,463	16,508,700	1,098,193

III

Distribution of Population according to Residence and Education.

(BRITISH PROVINCES)

Province	Females.			
	Total Population	Illiterate	Literate	Literate in English
Madras ...	21,448,236	20,994,401	453,835	44,289
Bombay ...	9,171,250	8,945,737	225,513	39,737
Bengal ...	22,544,314	22,140,364	403,950	44,720
U. P. ...	21,588,042	21,455,796	132,246	18,339
Punjab ...	9,378,759	9,300,611	78,148	11,293
Burma ...	6,455,223	5,807,877	625,706	21,206
Bihar and Orissa ...	17,238,323	17,134,617	103,706	8,147
Central Provinces and Berar ...	6,961,361	6,911,696	49,665	6,194
Assam ...	3,645,121	3,599,410	45,711	3,556
North West Frontier Province ...	1,022,024	1,013,055	8,969	1,301
Baluchistan ...	165,634	163,220	2,414	836
Ajmer-Merwara ...	225,705	220,601	5,104	1,113
Coorg ...	74,337	70,653	3,684	417
Delhi ...	206,555	199,486	7,069	1,816
Andamans and Nicobars ...	6,293	5,657	184	57
Total, British Provinces ...	120,131,177	117,963,181	2,145,904	202,951

IV

Mortality and Birth Rates.
(per 1,000)

Year	Mortality Rate		Birth Rate	
	British India	Bombay Presidency	British India	Bombay Presidency
1900	38·91	70·07	36·58	26·87
1903	34·91	43 91	38·96	31·22
1906	34·83	35·06	37·80	33·84
1909	30·91	27·38	36·65	35·59
1912	29·71	34·88	38·95	34·97
1915	29·94	26·12	37·82	37·10
1918	62·46	88·05	35·35	31·61
1921	30·59	26·00	32·20	32·59
1924	28·49	27·63	34·44	35·60
1926	26·76	28·55	34·77	37·05

V

Mortality in Certain Cities
1926.

	(per 1,000 of Population)
Madras	44·3
Bombay	27·56
Poona City	43·47
„ Cantonment	11·14
Ahmedabad City	51·98
„ Cantonment	24·64
Calcutta	34·7
Benares City	57·68
„ Cantonment	20·82
Agra City	53·39
„ Cantonment	16·85
Lahore	33·68
Nagpur	48·28

VI

(A)

Distribution of Indian Population at various Ages.

Ages	No. of Persons Crores	Ages	No. of Persons Crores
0–5	3·9	40–45	1·9
5–10	4·6	45–50	1·1
10–15	3·6	50–55	1·3
15–20	2·6	55–60	0·5
20–25	2·6	60–65	0·8
25–30	2·7	65–70	0·2
30–35	2·6	70 & over	0·5
35–40	1·8	Total	31·5

(B)

In Western Countries.

(Out of 1,000 inhabitants)

		Under 15	15–40 years	40–60 years	60 & over.
Germany	1900	348	395	179	78
	1910	340	400	181	79
England	1891	357	405	170	74
	1911	307	418	195	80
Ireland	1911	296	449	154	101
France	1906	344	303	353	...
Italy	1911	339	368	191	102
U. S. A.	1910	321	490	146	43

(O)

In Sholapur and Satara Districts of Bombay Presidency.

Age	Sholapur Dist. Population			Satara Dist. Population
0—1	24,112	...	...	28,772
1—5	69,786	...	...	99,479
5-10	1,09,073	...	...	1,55,994
10-15	88,116	...	...	1,24,407
15-20	49,885	...	...	66,873
20-30	1,21,871	...	...	1,54,137
30-40	1,07,657	...	...	1,46,412
40-50	73,909	...	...	1,07,874
50-60	50,510	...	...	73,517
60 and over	47,091	...	...	68,794
Total	7,42,010			10,26,259

CHAPTER IX.

TRADE AND ECONOMIC TRANSITION.

III. Transition :—The phase of economic evolution described in the last two chapters is, in many respects, not unlike the position in England in the beginning of the era of the Industrial Revolution, and India has already started on the path of radical changes similar to those witnessed in that country in the early decades of the nineteenth century. This is not to say that economic developments in India will be equally rapid and large-scale. There was a perfect co-ordination, under the old Indian system, which now threatens to pass away, of economic functions in rural areas and also an exchange between the towns and the villages, though the latter were much more isolated than they are now. Urban industries and trade were well developed, and arts and crafts flourished under the patronage of royalty, the nobility and the gentry. Indian home manufactures, like the British ones before the Industrial Revolution, " although greatly developed, were still largely conducted upon the domestic system, and the small capitalist-artisan was a conspicuous feature of that time, just as the large mill-owner or iron master is of our own to-day. Manufactures were carried on by a number of small master-manufacturers, who gave out work to be done in the homes of the emyloyes and who often combined agricultural with manufacturing pursuits. But nevertheless there were signs of the approach of the modern capitalist methods of production on a large scale."[1] The old Indian organization is now breaking down under the pressure of modern influences,—easy transport, use of machinary and power and foreign competition,—and the country is confronted with the problem of proper adjustment. The indigenous industrial system is in the throes of death and, it is to be hoped, of a rebirth; and it is vital that the nature of this transition should be clearly understood. A mere drifting into a new economic era is no less dangerous than desperate clinging to an old,

1 Gibbins; Industrial History of England.

effete industrial regime. The discredited Orthodox doctrine of individualism and *laissez faire* can not be accepted as a basis for public apathy.

Capital is invested, labour is exchanged and industries are organized by people with a set purpose in view viz. to secure a livelihood. A person may pursue a hereditary occupation or chalk out a new industrial path for himself: the spring of action is the same, though it may be strong and effective in one case and weak and insufficiently fruitful in another. The extent and the very existence of industries is, however, limited by the market or the demand for their products. The organizer or worker can not start a new industry or continue an old one unless there are consumers willing to take the goods produced in exchange for money or such commodities as he wants for himself. Mill's famous dictum that 'a demand for commodities is not a demand for labour,' is correct only on the now-exploded theory of the wages fund, and it is conceded that demand creates employment for labour by stimulating the investment of capital in industries. The consumer is, as it were, the master of the situation; and the variety, the quality and the quantity of production is dictated by his fancies which are largely influenced by prevailing prices. The three classes of workers who cater for his wants have been mentioned on a preceding[1] page, and illustrations of the goods they produce have been given. The point we desire to emphasise here is about the severe competition which prevails among producers, within and out-side the country, to satisfy the tastes of consumers. The latter can, of course, be controlled and regulated by moral and political considerations, sumptuary legislation, by prohibition and protective tariffs. But they are too strong to be mastered; and economic forces are bound to exercise a potent influence in the matter and should not be ignored. Take the cotton textile industry in India. The hand-loom weaver, the mill-owner in the country and the Lancashire and the Japanese manufacturer are all of them competing to capture the internal cloth market. The foreign manufacturer has the advantage of comparatively cheap machinery and capital, expert assistance, efficient management and extensive markets, and can land his goods in the Indian ports at cheap

freights. Success in such competition, internal and external, is very largely the key to the progress of industrial organization in India.[1] How to produce cheaply and well as large a variety as possible, of those goods that are imported from abroad or are exclusively produced and are in demand at home, is the problem that requires solution.

112. Importance of Trade :—Trade is not, as is often thought, merely a pendant hanging on production, but is an essential part of it, being bound to it both as a cause and as an effect. At every point, besides, it touches important elements of a nation's economic life. Even in a partially developed society satisfaction of wants has to be effected by the bringing together of the consumer and the commodities demanded by him, and the economic function of trade lies in performing this task with the least cost. The trader assumes this role and society pays him for his services. The market is the sphere where sales and purchases are made through the trader, and the question of prices and speculation here comes in. The laws of supply and demand and monetary circulation and credit exercise their influence in that connection, and we come upon problems of exchange, currency and banking as inextricably associated with trade. Means of communication and transport likewise play their part, and the localization, character and size of industries are determined with reference to them by the trader. We have an extension and complication of the above phenomena when trade expands beyond the limits of a nation, and the fiscal policy of the State assumes special importance, and one begins to doubt if the theory of international trade is the same as the one applying to internal exchange. Certain commodities have a particularly wide appeal and their sales and purchases, though effected on behalf of individuals and corporations, constitute a world market e. g. cotton and wheat. The community of persons who are thus brought together in economic intercourse and their operations form what German writers call "Welt-wirtschaft" or world economy. Cartels and trusts which override national boundaries and are based upon agreements with respect to prices, limits of production and spheres of sale, are the most refined phase of modern large-scale trade; and crises bcome recurring phenomena in

the financial world. Further, trade is not restricted to material goods and extends to claims to wealth represented by pieces of paper, and transactions in "futures" are an interesting feature of modern trading.

An ordinary person buys for personal consumption or for use in a factory; the trader purchases in order to sell or acts merely as an agent for another, charging commission for his labour. Traders are classed as speculative buyers and sellers on a large scale, wholesale dealers and retailers. The demand for goods and the purchasing power of people increased manifold in western countries during the two generations preceding the War; and the number of traders of all classes increased at a greater speed than the total population. The increase has been maintained since the end of the War. In Germany there are to-day 420 persons in each ten thousand, engaged in the distribution of goods as against 334 in the year 1907. Similar increase has taken place in other countries, and India is no exception. This increase is due to (1) the use of new articles e. g. gramophones, cycles, cigarettes and hundred and one other novel things, (2) the introduction of new methods of production, e. g. machinery, joint stock companies, industrial specialization &c., (3) increase of population, and (4) the introduction of new sources of raw materials and of new markets.[1] The price which the final consumer has to pay for a commodity is some times twice or thrice what the original producer receives, the balance being absorbed by middlemen of various grades and sorts and in expenses on advertisement, insurance, warehousing, finance &c. Whether the community pays too high a price for the services of traders and other middlemen, must be judged from the advantage it derives from them as compared to the cost imposed. The intimate relation which binds trade to industrial development, is instructively brought out as follows :— "Wants in a mass require mass production. The latter, together with revolutionary changes in the means of communication, tends to concentrate manufactures in places where conditions are favourable to the cheapest methods of production. Technical division of labour is introduced, machinery raises its iron head on all sides and improves its tools in a manner never conceived before. All this

increases the output of commodities to many times the quantities formerly produced in small, separate workshops. This circumstance, at the same time, divides the original producer, the manufacturer and the consunmer from one another and places between them first provinces, then nations and lastly, continents and oceans."[1]

113. World-Trade and India :—In the present chapter, we shall describe and discuss the system of India's trade, internal and external, with reference to its volume, direction and connection with indigenous industries generally, and its other aspects, fiscal and financial, will be dealt with in the succeeding chapters in appropriate places. The internal trade of a country is many times larger than the external, and this relation depends upon the density of population, size of a country and the state of the industrial development of the people. The more industrially advanced and prosperous a country is, the larger is its external trade, because it is through the latter that it obtains raw materials for its industries and secures markets for its manufactures. Intercourse with foreign countries, besides, consists in the exchange not only of commodities but also of services. The "Welt-wirtschaft" is a community of nations politically organized as independent entities (except, of course, subordinate colonies) brought together by this intercourse and exchange[2]. The present form has been imparted to it by developments which have taken place in the course of the history of the last hundred years. The trade relations thus established, rise above national peculiarities of internal economic organization, e. g. complete State control of trade inside and outside Russia by the government of the Soviet Republic.

World economy does not show the same free movement of goods and services between its parts as national economy between its members. Division of labour, ready supply of capital, facilities of communication and transport, currercy, credit and financial systems create differences which keep the two economies apart, though modern economic developments have tended steadily to bring nations together on the principle that each is equally interested in the prosperity of all. What strides international trade had made during

the last fifty years preceding the War, may be seen at a glance from the following figures.[1]—

Value of World Trade.

Years	Million Dollars	Years	Million Dollars
1800	1,479	1870	10,663
1820	1,659	1880	14,761
1830	1,981	1890	17,519
1840	2,789	1900	20,105
1850	4,048	1913	40,420
1860	7,246		

This extraordinarily rapid increase in international trade was stimulated mainly by improvements in sea communications; and developments in that respect are illustrated in the following statistics relating to shipping engaged in the world-trade :—

World Tonnage of Ships over 100 tons each.

Years	Sailing vessels (1,000 tons)	Steamships (1,000 tons)	Railways (1,000 miles)
1850	11,470	864	24·0
1860	14,890	1,710	67·4
1870	12,900	3,040	139·8
1880	14,400	5,880	224·9
1890	9,166	8,895	390·0
1913	3,881	26,517	690·2

Increase in telegraph mileage has been equally rapid and extensive. In 1860, the mileage was 100,000; in 1900 1,118,000; in 1913, 1,462,000. Trade per head of the world's population was 3·76 dollars in 1850, and it increased to 34·4 dollars in 1913. The share of different countries in this trade, of course, varied. For instance, while the per capita trade in 1913 amounted to £ 5 for the whole world, the per capita share of the British population was £ 29, made up of £ 12 for exports and £ 17 for imports. The compara-

tive shares of different countries are given in the following table as percentages of the total :—

Percentage share in World-trade.

Years	1904	1912		1904	1912
In Europe			In Australasia		
Great Britain	18·0	16·2	Australia &c.	2·0	2·2
Germany	11·7	12·6	In America		
Netherlands	7·1	6·8	U. S. A.	9·8	9·6
France	8·7	8·8	Argentina	1·7	2·1
Belgium	6·3	6·5	Canada	1·9	2·6
Russia	3·4	3·4	Brazil	1·3	1·6
Austria	3·5	3·3	In Asia		
Italy	2·8	3·0	India	3·6	3·5
In Africa			China	1·7	1·6
Excl. Egypt	1·1	1·2	Japan	1·4	1·4
Egypt	0·8	0·7			

The material of the world-trade consists mainly of articles of food e. g. wheat and meat, raw materials of industry, cotton, coal, oil &c. and finished products of various kinds. It need not be pointed out how nations have come to be dependent upon one another in this respect. The vital importance of mineral oil in modern economic life is universally acknowledged. The following table gives the relative shares of countries in the world's total production :—

Mineral Oil Production

(In Millions of Barrels of 42 gallons each)

	1913	1921	Percentage Share
U. S. A.	248·0	472·0	61·7
Mexico	25·9	193·0	25·3
Russia	62·8	25·4	3.8
Persia	—	12·3	1·6
East Indies	11·9	16·9	2·2
Rumania	13·5	8·3	1·1
India	7·9	8·0	1·0
Poland	7·8	5·1	0·7

Wheat Production in 1913

(In Millions of Quarters)

In Europe	282,875
„ America	143,030
„ Asia	50,122
„ Africa	10,424
„ Australia	13,673

Corresponding figures may be given for coal, iron, raw cotton, rubber, sugar and other commodities which figure prominently in world-trade. India plays but a small part in the provision of these commodities, in relation to its size and population. Even in the case of raw cotton, the U. S. A. takes the lead, its share being nearly one-half of the total production of the world viz. 15 million bales out of 30 millions in 1913-14 and 11·6 millions out of 20·7 millions in 1918-19. India's share was 3·6 million bales. The same remark may be made about wheat, coal and other goods, the striking exceptions being jute and tea. In the case of manufactures, there is, of course, no comparison between India and western countries. In supplying the world with manufactured articles, England takes the lead; but Germany has fast developed in that direction, as will be seen from the following analysis of her export trade in 1913 :—

German Exports

Commodities		Percentage of Total
Raw Materials	...	15·8
Partly Manufactured goods	...	10·6
Manufactures	...	61·0
Food products	...	12·5
Living Animals	...	0·1
		100

The above account of the nature and the size of world-trade will prove useful in understanding India's position in world economy. We shall have occasion, as we proceed, to point out its bearing upon the economic development and prospects of India and to discuss the relation of world-economy to Indian national economy. In the mean while, we proceed to deal with the organization and

tendency of the internal and the external trade of this country, and in doing so we shall attempt to explain the relation of theory to practice in plain terms.

114. Exchange :—Except in the early stages of economic development, the work of wealth-production is not completed till the commodity produced is exchanged for another, and if necessary, taken to a place where it will find purchasers. A worker may indeed conceivably produce for his own consumption, and not to speak of old times, in backward communities even at the present day, self-sufficing families and communities are not quite uncommon. But a division of labour and exchange of goods and services are found necessary as a community advances, and specialization and co-operation in the case of individuals and groups of individuals, characterise the progress of civilization. Production is prompted and governed by consumption; and as food and clothing are the chief needs of the rural population, the peasants can satisfy their ordinary wants without much resort to exchange, particularly if they make their cloth at home. But even the simple life and industry of the cultivator require the co-operation of other and different kinds of workers *e. g.* the makers of his plough, cart, ropes and water-lift, and he has to obtain the products of their labour by exchanging his own farm produce which, in its turn, satisfies the desire for food on the part of those artisans and craftsmen. Individuals exchange with one another the goods they have produced for other goods which they want and can not or do not produce themselves. When one commodity is exchanged for another without the intervention of a third, which is the measure of value, we have a case of barter, and the use of such a medium of exchange bespeaks the advance of a community to a money economy. Barter is a simple process, but it does not ensure easy exchange of forms of wealth offered and demanded; nor does it enable an exact equivalence of the value of commodities being estimated. Hence the introduction of a common measure of all values, viz. money. As the individual was induced to exchange the products of his labour for those of others, on account of the advantage the transaction conferred on the exchanging parties, villages and towns could be conceived as trading with one another for a similar benefit. In the latter case likewise the exchange is between individuals; it is only considered from the point of view of groups. This remark appplies to inter-

national exchange also, which, however, raises questions of commercial policy of special importance.

The Indian village has, for centuries, been a self-sufficient community economically as well as administratively. It was fully organized for the production of wealth as much as for defence, and obtained by exchange with neighbouring communities only such commodities as it was impossible locally to produce for such goods as were in excess of local demand. In the village life of India, exchange is very simple and much of it is of the nature of barter. The cultivator will often buy his implements and clothes by exchanging the produce of his fields for them, and wages for a variety of services rendered by rural workers and servants are also paid in kind. Formerly, the revenue of government was likewise paid in grain; but the system of barter is fast giving way before the use of money and is now almost unknown in towns and large villages. A common measure of value and medium of exchange having recently come into greater use, a struggle for the possession of money as a ready means for the purchase of any desired commodity, is becoming universal except in out-of-the-way places to which advanced methods of trade and industry have not yet penetrated. It is impossible to over-estimate the advantages of exchange; and a comparison of the ease with which even a person of ordinary means can now-a-days, obtain a variety of articles, necessaries of life and luxuries, in his own locality, with the extreme difficulty experienced in the matter only a few years ago, will be instructive. Owing to facilities of exchange, villagers can now draw upon the whole country, and the entire world is open to them for supplies. India's cotton, jute, tea, wheat, oil seeds and hides find customers in Japan, England and U. S. A. and on the European continent, and foreign producers send their goods in exchange. This is not actual barter, however, and the exchange does not directly take place between exporters and importers. People of one district import food grains, sugar, salt, cloth, kerosene oil, iron sheets and other articles from neighbouring or even distant districts and provinces.

115. Markets and Fairs:—The wants of the rural population are so simple and few that it is scarcely worth while for a person to devote himself to catering for them by becoming an intermediary and by purchasing goods from producers and selling them to con-

sumers. The smaller villages are, therefore, without merchants and shops. On market days and when there are fairs, villagers go regularly to the neighbouring town, and all kinds of sales and purchases are made there. The markets provide facilities for producers and consumers, both to dispose of surplus goods and to procure the articles required. Here the artisans and agriculturists some times sell their goods direct to consumers, particularly when the quantities dealt in are small; but the bulk of the transactions are executed through middlemen. In the larger villages, there are one or two shops for such necessaries of the rayat as cloth, vegetable oil, kerosene, chillies, salt and vegetable; and luxuries such as sweetmeat, toys and sugar have to be procured from the neighbouring town. These can be had on any day or may be obtained from the market held regularly once or twice a week. At these markets, articles are available in sufficient variety and in the required quantity, and the prices also are reasonable. Cultivators, weavers, potters, and other producers take their goods to the market or fair where they meet buyers; and middlemen and merchants also do a large business on market days. Cattle, butter, vegetable, fruit, cotton and woollen yarn, cloth, shoes, implements and tools, pottery, domestic utensils and numerous other objects form the staples of the regular markets some of which specialize in certain varieties of goods.

Under the simple system of barter, villagers, whether cultivators or artisans, exchange the produce of their labour directly to satisfy their wants; the cultivators obtain their cloth, shoes, earthen pots, and other necessaries from the village artisans in exchange for the *baluta* or fixed grain charge paid to them annually. This village system is, however, being steadily displaced, and payment in money is becoming common. A system of contract is thus being substituted for one of custom. In markets and fairs, this is, of course, the usual practice. Every village of decent size, has a shop or two of groceries and this is a kind of a store, the only source of the supply of articles of every day use to the villagers, other things being purchased on market days. The weekly or bi-weekly markets in certain places are of great size and attract sellers and purchasers from long distances. A taluka in the Bombay Presidency, with a population of about one lakh has, on an average, seven to twelve markets, whose

is a busy day and also a holiday for the village folk. Families lay in a stock of necessaries to last them for a week. Knickknacks, holiday clothing, sweetmeat and other articles of luxury are generally purchased at fairs, most of which are associated with religious or social festivals. It can hardly be expected that any one system of exchange should prevail in a country of such dimensions and economic variety as India. Apart from the obvious distinction between rural and urban conditions, the Provinces have characteristic features of their own. Foreign trade, carried on to suit the modern system of trade, reacts on the methods of internal exchange ; and trade has also been adjusted to the peculiarities of local conditions. In Bengal, for instance, where the village organization is non-existent, there are no small towns and consequently there are few permanent shopkeepers, and the larger part of the exchange of articles ordinarily required by the household is carried out by the cultivators and producers themselves at the periodical country markets without the intrusion of any middleman. [1] In other parts of India, and particularly in Burma, the large proportion of the exchange is effected through persons who make it their special business to buy from producers and to sell to consumers, a few persons always preferring to do this on their own account. The latter, therefore, combine in themselves the double function of producers and salesmen; and the periodical markets or 'bazars' furnish them with the facilities for the transactions.

116. The Trader:—The *hats* and bazars of India are an attractive feature of her economic life ; and their existence and popularity are easily accounted for. Shops and stores bespeak a certain stage in progress; and any specialization and extensive division of labour in the sale of commodities are not possible in small places. It is only in big villages and towns that merchants and shopkeepers specialise in the sale of articles and play an important role in the rural economy; and in small towns, of course, the trader discharges a useful function. Like barter, direct exchange of goods between producers and consumers involves considerable inconvenience and loss. The farmer may not find customers to take the produce off his hands and may have to dispose of it at unremunerative prices. He can not stock it and can not afford to wait till there is sufficient

1 *Census Report*, 1921.

demand for it. Similarly, in their capacity as consumers, the cultivator, the craftsman and the labourer can not hope to be able to procure their necessaries at the times when they are wanted and in quantities in which they are required, directly from the producers of those commodities. The trader here comes forward, ready to shoulder the risk, the trouble and the expense of obtaining, storing and supplying goods. There are certain merchants who are middlemen in the literal sense of the word and act as agents of their clients, and buy nothing on their own account; but they provide financial and storing facilities. This is a distinct service rendered to the community by the merchant, wholesaler and retailer, and receives its due remuneration. Current prices of commodities may include the profit of the middleman or trader, which amounts to a deduction from the value of producers' goods. The merchant, however, adds to the utility of objects by collecting and distributing them for the benefit of consumers, and the producers also share in the resulting increase of value. The trader keeps a pretty large stock of goods ready to meet the normal demands of his customers whenever they may choose to buy. He procures his supplies direct from cultivators and from different commercial and industrial centres and retails the articles as they are wanted.

A little more than $1\frac{3}{4}$ crores of people are supported by trade in India, and out of these nearly 80 lakhs are actual workers, about one-third of them being women. One-half of the workers are engaged in trade in food stuffs alone. Trade was assigned as an occupation to the Vaishya class by the ancient Hindu law and custom, but in the social development of centuries, trade has been taken up by persons irrespective of their castes, Brahmins not excepted. The available means of transport set limits to the extent of trade, and pack animals and bullock carts have been commonly used in India for purposes of transport. Certain communities and castes have specialized in wholesale and retail trade and the Parsees, the Marwaris, the Baniyas, the Gujars and the Bohras may be mentioned as typical in this line. Railways, which now traverse the whole continent, have revolutionised the old system of exchange. Their net-work covers the whole country and has brought distant districts and provinces in close contact with one another. Before the fifties of the last century, the means of communication in India were difficult, and

though commerce was maintained between north and south and east and west, it wss precarious and its volume was exceedingly small. Inter-provincial trade has enormously increased since then, and the surplus of one province and district goes to supply the deficiencies and needs of other provinces and districts while the country, as a whole, has been brought into direct touch with the outside world. This stimulus which the improvement of the means of communication, such as railways, steamships, metalled roads &c. has given, is most markedly seen in the wonderful development of the foreign trade of India. The machinery of import and export trade differs from that of internal commerce not in substance but only in size and complexity.

117. Ancient Indian Commerce:—The sea-borne and foreign trade of India has had a brilliant history. The valuable products of Indian workmanship and of the Indian soil, attracted merchants from all parts of the globe and the people of this country carried on a profitable trade with the most distant parts of the world.[1] *In fact, it was over-seas trade which made India so famous in ancient times.* In the Vedas there are distinct references[2] to those 'who desiring wealth send ships to the sea' and to voyages of 'parties, of merchants going on the ocean in ships with a hundred oars, to distant lands for sale and barter.' In Budhist literature there is frequent mention of internal trade routes traversing the continent along rivers and coasts, e. g. Broach to Burma and land roads.[3] Kautilya speaks of the comparative advantages of water routes

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1 "From the earliest days, India has been a trading country. The industrial genius of her inhabitants, even more than her natural wealth and her extensive sea board, distinguished her from other Asiatic lands. In contrast with the Arabian Peninsula on the West, with the Malayan Peninsula on the East, or with the equally fertile Empire of China, India has always maintained an active intercourse with Europe. Philology proves that the precious cargoes of Soloman's merchant ships came from the ancient coast of Malabar. The brilliant mediaeval republics of Italy drew no small share of their wealth from the Indian trade. It was the hope of participating in this trade that stimulated Columbus to the discovery of America and De Gama to the circumnavigation of the Cape of Good Hope. Spices, drugs, dyes and rare woods; fabrics of silk and cotton; jewels and gold and silver—these were the temptations which attracted the first adventurers from Europe."—Sir W. W. Hunter : The British Empire.

2 P. T. Shrinivasa Iyengar : Life in Ancient India.

3 Rhys Davids ; Buddhist India.

and land routes and cart tracks and foot-paths, and disagreeing from his teacher, prefers the route leading to the south to one leading to the Himalayas, with the remark, "for with the exception of blankets, skins and horses, other articles of merchandise such as conch shells, diamonds, precious stones, pearls and gold are available in plenty in the south.[1]" The spices, timber and other products of South India were highly prized in foreign countries, and Indian luxuries were in great demand in Rome. The prosperity of ancient Indian commerce is a matter of history, and it will be no exaggeration to say that the political development of the nations of Europe, and therefore of the whole world, has been shaped by the competition of European powers for the monopoly of Indian trade. The position of India was thus simply unique.[2]

From the time of Darius when 'India' was a satrapy of the Persian Empire to Alexander the Great's invasion of the Punjab, from the Mauryan period of Indian history to the palmy days of the Roman Empire, from the fall of Rome to the Crusades and from the Holy Wars to the struggle for trade monopoly, of Portugal, Holland, England and France, India's communication with Western Asia and Europe was maintained along sea and land routes, and Indian harbours on the western and eastern coasts were ever alive with trade in indigenous products like diamonds, pearls, spices, ivory, cloth &c. India received payment largely in precious metals from the West. The foreign trade was carried on for centuries through Persia, Mesopotamia and Asia Minor and over the Arabian sea from and to ports on the Malabar coast. The share of southern India in this foreign trade, was naturally considerable. The history of India's external trade during the seventeenth and eighteenth centur-

1 Arthashastra (Shama Shastri's Translation) page 368.

2 "We shall have ample evidence to show that for full thirty centuries India stood out at the very heart of the Old World, and maintained her position as one of the foremost maritime countries. She had colonies in Pegu, in Cambodia, in Java, in Sumatra, in Borneo and even in the countries of the Farther East as far as Japan. She had trading settlements in Southern China, in the Malayan Peninsula, in Arabia and in all the chief cities of Persia and all over the east cost of Africa. She cultivated trade relations not only with the countries of Asia but also with the whole of the then known world, including the countries under the dominion of the Roman Empire, and both the East and the West became the theatres of Indian commercial activity and gave scope to her naval energy and throbbing international life."—Radhakumud Mukerji: A History of Indian Shipping and Maritime Activity.

ies, is a record of the commercial rivalries and of a struggle for trade supremacy among the Portugues, the Dutch, the French and the English. One after another, these rivals dropped out, and the British East India Company remained master of the field. "Just before the first half of the eighteenth century, the English had to face the open hostility of the French; and the history of trade is merged in that of territorial acquisition, till in 1813 the trading functions of the Company in India were brought to a close, except so far as the monopoly of trade with China was concerned and this also ceased in 1833."[1]

The volume of India's foreign trade in the beginning of the nineteenth century, was comparatively very small. The European adventurers had not been able to penetrate the interior of the country and there were no facilities for such impenetration. "It was in fact practically impossible to penetrate inland or to draw thence to the coast any of the products of the interior; and even if facilities had existed for local traffic, it would have been impossible in the conditions of navigation which then existed, to convey to Europe at a profit the bulky articles of low value which now maintain great fleets of ocean steamers and are the staples of Indian trade."[2] The monopoly of the trade and the disturbed nature of the internal state of the country, were additional causes which limited the dimension of the foreign trade. The East India Company, however, selected precious cargo which fetched enormously high prices in England, and the dividend it give in 1832 was 150 per cent.

118. Under Company Rule:—The Mahomedan and Hindu rulers did not and could not devote much attention to the development of foreign trade. European traders secured concessions from them and established their 'factories' at various ports. Abul Fazl describes a number of these busy ports, and referring to the coast of Gujarat, remarks: "Through the negligence of subhedars and their officers, several of the sirkars are in the possession of the Europeans; amongst the number are Dummun, Surjaun (St. John), Tarapoor, Mahum, and Bussy (Bassien), which are cities and emporiums."[3] The country produced such a variety of wealth that it

1 Imperial Gazetteer, Vol. III, page 259.

2 Imperial Gazetteer, Vol. III.

3 Aynee Akbari.

was not felt necessary to exchange indigenous produce for foreign imports to the same extent as it was in European countries which vied with one another to obtain the valuable products of India. The rulers were self-centred and were concerned more with the stability and prosperity of their own dynasties and kingdoms than with the foreign trade of the country as a whole. As Sir W. W. Hunter remarks, the British rulers were not temple builders like Hindu kings or palace builders like Mahomedan nabobs and emperors, or fort-builders like the Maratha warriors, but they were essentially builders of commercial towns, and their talent lay in selecting and developing centres of trade. In the hands of the British East India Company, which had become a territorial and sovereign power by the beginning of the nineteenth century, foreign trade steadily increased in dimensions. At the beginning of the eighteenth century the value of exports from India hardly amounted to one million £, but by 1834 it exceeded £ 8 million.

Under the rule of the Moguls and the Marathas, internal trade continued to be carried on in the old way. Big caravans conveyed goods from one part of the country to another and one class of traders specialized in this traffic. Abul Fazl describes various centres of industry and the kind of trade that was carried on with them. Speaking of the subha of Malwa he says that 'this province is so fertile that it supplies both the Deccan and Gujrat with grain.' Agra, Allahadad, Burhanpur and other large cities are described as industrial centres where craftsmen of all denominations congregated and produced a rich variety of articles. Among the commodities imported into Oudh from the Northern mountains, the following are mentioned :—Gold, copper, lead, musk, cow tails, grapes, pepper, wax, woollen cloths, wooden ware, amber, rock-salt and glass toys. They were brought on the backs of men, horses nnd goats. Owing to the vastness of the country and the large variety of the products of its industries, internal trade was practically international trade.

The Industrial Revolution in England which meant the introduction of steam power and machinery and consequently the production of cheap articles on a large scale, synchronised with an industrial revolution of a different kind involving the stagnation and decline of the industries of India, which were reflected in and assisted by India's foreign trade. Indian trade was opened to European private merchants in 1813, and during sixteen years after that date,

the I. E. Company's trade averaged £ 1,882,718 annually, while private trade averaged £ 5,451,452 annually.[1] This unfortunate revolution in the character of the foreign trade of India was disastrous to her industries. The people were steadily driven from their handicrafts to the plough, and agriculture tended to become the sole support of an increasing population. The unsatisfactory economic condition of India to-day, when our exports consist mainly of raw materials and our imports of manufactured goods, may be traced to this revolution. How the position of India as a producer and exporter of cotton piece goods was reversed, may be seen from the following figures relating to the import of Indian cotton goods into England and the export of English cotton goods to India :—

Cotton Piece Goods imported into Great Britain from the East Indies :—

1814	...	1,266,608	Pieces.
1821	...	534,495	"
1828	...	422,504	"
1834	...	306,086	"

British Cotton Manufactures exported to India

1814	...	818,208	Yards.
1821	...	19,138,726	"
1828	...	42,822,077	"
1835	...	51,777,277	"

119 Railways and Irrigation:—While this reverse process was in operation, imports of British cotton goods had to pay a duty of only 3½ per cent.; and the corresponding imports into England were subjected to a duty of 10 per cent. Owing to the defective character of the means of communication in India and the heavy

1 "The process of the extinction of Indian manufactures went on, however, under the new arrangements; in 1813 Calcutta exported to London two millions sterling of cotton goods, in 1830 Calcutta imported two millions sterling of British cotton manufactures. The first import of British cotton twist into India was in 1823; in 1824 it was 121,000 lbs.; in 1828 it rose to 4,000,000 lbs. Woollen goods, copper, lead, iron, glass and earthen ware were also imported. British manufactures were imported into Calcutta on payment of a small duty of 2½ per cent. while the import of Indian manufactures into England was discouraged by many duties ranging up to 400 per cent. on their value."—R. C. Dutt: "India Under Early British Rule," page 293.

freights which had to be paid on exports abroad, the development of trade was indeed very slow.[1] A policy of vigorous improvement of communications and the construction of railways, was commenced in the time of Lord Dalhousie and was pursued in spite of financial difficulties. Interest on railway capital guaranteed to companies or raised by Government, was paid out of revenue, and 'cotton roads' were pushed on with rapidity. Indian railways were, at their inception, mainly strategic and political and also helped to create a wider market for British manufactures. Fed with the free trade doctrine which had become the economic creed of England and goaded by the self-interest of Lancashire, Government was anxious to open the country by means of railways and roads in order to facilitate the export of India's raw products and the imports of manufactured goods, regardless of the consequences to the economic future of the Indian people. The needs of irrigation which should have been pushed forward with equal, if not greater, enthusiasm and vigour, were ignored though they were, even at that time, pressed upon Government's attention. Facility of transport was desirable; but it was equally if not more desirable that the productivity of the soil should have been ensured and directly enhanced. But railway extension was, for years, Government's great obsession, and irrigation was treated with comparative neglect.

The assumption of the government of India by the Crown made no change in policy; and the question was pointedly raised more than fifty years ago. The author of "The Indian Problem Solved" put it thus:—"Does India want railways or irrigation works? Can railways provide water for India's land when land is thirsty and hard baked, or provide drainage for preventing floods? Can railways produce food grains and other agricultural produce, as it is created by water from irrigation works? Can famines be prevented in India to any extent to be compared with irrigation works? The answer to all these questions must be in the negative". The hasty extension of railways, unaccompanied by other measures of economic

1 "The progress of the trade continued, however, to be comparatively slow, owing to the natural obstructions which remained after the company had established its rule over much of the Indian continent. During the first half of the 19th century roads were non-existent except where they had been constructed for military purposes; off these great routes all traffic was carried over narrow unmetalled tracks impossible during the monsoon."—Imperial Gazetteer, Vol. III, page 261.

improvement, had disastrous effects upon the indigenous industries, and therefore, on the productive capacity of the people.[1] A number of devastating famines were needed to bring home to the mind of Government the importance of irrigation. It appears to have been thought that the introduction of rapid means of transport and a vigorous external trade conferred a substantial benefit on the people; and it did not dawn upon the authorities that India was not a new country which awaited the advent of the exploiter for its economic development.

120. Features of External Trade:—The steady growth of India's sea-borne trade will be seen from the following figures:—

Sea-borne trade

Average Years	Imports, including treasure (Crores of Rs.)	Exports, including re-exports.
„ 1834-5 to 1838-9	7·32	11·32
„ 1839-40 to 1843-4	10·45	14·25
„ 1844-5 to 1848-9	12·21	16·99
„ 1842-49 to 1853-4	15·85	20·02
„ 1854-5 to 1858-9	26·85	25·85
„ 1859-60 to 1863-4	41·06	43·17
„ 1864-5 to 1868-9	49·31	57·66
„ 1869-9 to 1873-4	41·30	57·84
„ 1874-5 to 1878-9	48·22	63·13
„ 1879-80 to 1883-4	61·81	80·41
„ 1884-5 to 1888-9	75·13	90·28
„ 1889-90 to 1893-4	88·70	108·67

1 "The extraordinary rapidity with which the construction of railways in India was achieved, produced an economic revolution in that country which like all revolutions, was not unaccompanied by suffering. The obligation to save life in times of drought and the necessity of lines of strategic utility (for it was the mutiny which gave the first real incentive to construction) have been the cause of the rapidity; and it has had for effect the destruction of the native industries and the concentration of labour on that very employment to which droughts are the most dangerous. Had strategic or economic considerations allowed the change to be more gradual, it is conceivable that greater powers of resistance might have been shown by the native industries, that the lessons of the West might have been taught before destruction was inevitable, so that labour might have drifted to other occupations as well as to agriculture." —Loveday: Indian Famines.

Average Years			Imports, including treasure (Crores of Rs.)	Exports, inculding re-exports and treasure.
„	1894-5	to 1898-9	88·59	113·93
„	1899-1900	to 1903-4	110·69	135·59
„	1904-5	to 1900-9	156·00	875·35
„	1909-10	to 1913-14	198·87	232·54
„	1914-15	to 1918-19	198·32	233·13
„	1919-20	to 1923-24	320·21	319·65
Year	1926-27		282.35	313·26
„	1927-28		296·44	333·40

The characteristic features of this development of trade which arrest attention, are (1) the enormous increase which has taken place in the volume and the value both of imports and exports. The expansion is primarily due to the opening of the Suez Canal, the improvement of shipping and railway transport and the economic progress of foreign countries which want India's raw materials and exchange for them their own manufactures. (2) The old staples of export and import have entirely been replaced by others. The rare and valuable products of India, manufactures as well as raw materials, which were in demand in foreign countries, have now given place to such raw materials and food grains as are required in those countries for purposes of manufacture and food. The imports consist mainly of manufactured goods which go to satisfy the newly acquired tastes of the people or are substitutes for articles formerly turned out in this country. The exports of textiles, sugar, coffee, indigo, shawls and silk have fallen off and those of cotton, jute, tea, rice, oil-seeds and hides and skins have increased. Cotton, woollen and silk cloth, machinery, motor cars, watches, glass, steel, matches and sugar have been imported in growing quantities. (3) The annual excess of exports over imports has steadily increased so that the balance of trade is normally largely in favour of India. Bulk of this excess represents the 'Home Charges' which this country has to pay annually in England, the remuneration for the services of foreign bankers, shippers and insurance companies, the profits of European merchants and firms and the savings of European officials, remitted to England. (4) The balance of the excess is

received in India in the form of gold and silver. (5) The net imports of the precious metals, particularly of gold, have steadily increased during the past few years. Though they appear to be absolutely large, it can not be said, however, that they are excessive in view of the huge population of this country. (6) The imports of the precious metals also point unmistakably as much to the economic backwardness and low standard of living of the people as to their peculiar habits and social customs ; and they have assumed special importance owing to their intimate connection with the currency and exchange system of India and the monetary situation practically of the whole civilized world. (7) Bulk of the imports, about 50 per cent., come from the United Kingdom which, however, takes only 25 per cent. of our exports. (8) The profits of this trade, very largely, and the gains derived from shipping, insurance, banking &c. connected with it, wholly fall into the hands of Europeans. (9) By its effect on consumption and production, foreign trade has brought about a social no less than an economic revolution. (10) Internally, it has tended to establish a new equilibrium of supply and demand, and therefore, of a new division of labour and localization of industry and the equalization of prices over large areas. (11) In view of the economic backwardness of the country and the low standard of living of the people, the amount of foreign trade per head of the population is small in comparison with western countries.

121. War and Foreign Trade:—The period of war was naturally a time of abnormal conditions, and the years that immediately succeeded its close, witnessed a boom in foreign trade quickly followed by depression. A slow transition to the normal then set in, and the per-war state was almost reached in a few years. The course of the world-trade has shown a similar tendency. The distraction of the world-wide struggle and India's direct participation in its prosecution, had the effect (1) of curtailing the quantities of imports, (2) stimulating exports of war necessaries, (3) raising the prices of commodities and the values of foreign trade and (4) checking the inflow of silver and gold. (5) The huge profits made during the war years engendered a spirit of speculation, and (6) high hopes were entertained of the industrial possibilities of the post-war period. (7) The anticipations of prosperity, which may be seen reflected in the imports of machinery and manufactured goods on a large scale and at high prices, were cruelly disappointed. (8) Imports which had

been ordered in expectation of industrial activity poured into the country but exports were not in sufficient demand in outside countries, owing to economic and financial depression. (9) The balance of trade, usually favourable to India, became suddenly adverse for a time and there was a net export of gold! (10) Foreign exchange, which had soared to unprecedented heights, collapsed with a thud and uncertainty prevailed on all sides. These features are brought out in the statistics given below. (11) Attention may be drawn to one other fact, and it is the relative position of foreign countries in Indian trade. During the war, enemy countries naturally lost all their share in it, and Germany has been steadily recovering the ground. U. S. A. and Japan increased their shares in Indian trade, and the United Kingdom's portion was slightly reduced.

Foreign Trade (In Crores of Rs.)

	Imports	Exports	Total Merchandise	Treasure Imports	Treasure Exports	Treasure Net imports	Grand total	Gold-Net Imports
Quinquennial average 1909-10 to 1913-14 ...	151·67	224·23	375·90	47·20	8·32	38·88	431·42	28·15
Quinquennial average 1914-15 to 1918-19 ...	159·25	225·83	385·08	36·07	7·30	31·77	431·45	7·88
In the year 1919-20 ...	221·70	336·03	557·73	78·24	13·68	64·56	649·65	35·33
,, ,, 1920-21 ...	347·58	267·76	615·32	34·76	26·17	8·50	676·27	2·11
,, ,, 1921-22 ...	282·5	248·6	531·2	31·3	19·0	12·2	581·6	2·8*
,, ,, 1922-23 ...	246·1	316·0	562·2	62·5	3·0	60·5	628·8	41·1
,, ,, 1923-24 ...	237·1	368·3	600·5	53·2	0·6	49·5	657·4	29·1
,, ,, 1924-25 ...	253·3	400·2	653·6	99·2	5·1	94·0	757·9	73·9
,, ,, 1925-26 ...	236·0	386·8	622·8	55·4	3·6	51·6	682·1	34·8
,, ,, 1927-28 ...	261·5	330·2	591·8	34·9	3·1	31·7	629·8	18·1

* Net exports.

The following table shows the values of the imports and exports of merchandise, based upon the declared values in 1913-14. It illustrates the slow recovery of trade to the pre-war dimensions on the export side and in a less marked manner in the imports and the old equilibrium ultimately in both.

(In Crores of Rs.)

	1913-14	1919-20	1921-22	1923-24	1925-26	1627-28
Imports ...	183	101	124	137	143	181
Exports ...	244	198	182	250	246	248
Total (excluding re-exports) ...	427	299	306	387	389	429

122. Industrial Revolution:-The relation between trade and national industries is intimate since the success of the latter is conditioned by the size of markets for goods produced and by the supply of raw materials, both of which are dependent, to a considerable extent, on the machinery of exchange. Trade likewise puts foreign manufacturers in competition with national industries at the same time as it creates outlets for the latter's output. The rapid development of trade throughout the world has revolutionized the economic systems of almost all countries, in the east as well as in the west, and profoundly influenced their industrial organization. The competition set up by trade between producers has stimulated the growth of industries in some places and depressed and destroyed them in others, creating a fresh adjustment from time to time. The change in India from a position in which there was a healthy co-ordination of the agricultural and non-agricultural industries, of course on a basis comparatively narrow in view of the huge dimensions of modern trade and industries, to a condition in which the country has become a big market for the sale of Western, (now Japanese also,) manufactures and a field for the production of raw materials to be manipulated in foreign factories and mills, is a case of retrogression which is responsible for the decadence and poverty of the people.[1] The position of dependence and helplessness was accentuated by low sea freights and the extension of railways, which threw into disorder the old economic organization by bringing the factories of England into destructive competition with the handicrafts of India. The

1 "The great Indian Dependency of England had, during this century, come to supply the place of the old colonies. This Dependency has come to be regarded as a Plantation, growing raw produce to be shipped by British Agents in British ships, to be worked into fabrics by British skill and capital, and to be re-exported to the Dependency by British merchants to their corresponding British firms in India and elsewhere. The development of steam-power and mechanical skill, joined with increased facilities of communication, have lent strength to this tendency, and as one result of the change, the gradual ruralization of this great dependency and the rapid decadence of native manufacture and trade became distinctly marked. Even now the danger is not over."—Ranade : Essays in Indian Economics.

spread of western education and ideas, the creation of new wants and tastes among the people, the introduction of modern forms of administration and changing conceptions of life generally, likewise played their part in bringing about the unfortunate development. All radical changes adversely affect the condition of large sections of the community, and the period of transition is one of difficulty and even of distress. The peculiarity of the position in India is that readjustment and recovery were long delayed, that the people helplessly drifted into an unhappy economic state and that improvement has been extremely slow.

The industrial revolution in England which meant the substitution of machinery in the place of manual labour, the application of large masses of capital to wealth-production by professional 'enterprisers' and the conversion of autonomous workers into factory hands, did not fail to produce results of this nature. But readjustment took place in the course of a generation and the revolution left the people in a far better condition than before. It meant the predominance of manufactures over agriculture and an enormous increase in the quantity of wealth created and in foreign trade; it required and led to freedom of trade on account of the urgent demand for cheap raw materials and food and open markets for the disposal of manufactures; and it signified increased national capacity for wealth-creation and augmented national dividend. But the industrial revolution which occurred in this country on the establishment of British rule, brought about not only the reversal of the character of India's import and export trade and the consequent disturbance in the harmony and co-ordination between agriculture and manufactures but the decline of handicrafts and other industries and the resulting unemployment, impoverishment and demoralization of the people.[1] The growing imports of foreign manufactures and export

1 "The economic revolution which took place in England was the result of indigenous forces, and, as in the case of all external changes which correspond to internal activities after a period of disturbance during which capital and labour shifted to new spheres of action, a new equilibrium was established. Capitalists who were deprived of the old sorts of investment found new ones offered to them, workmen who found old industries failing moved to a much larger world of work. But in India the upper classes have lost many of their old sources of income as administrators, soldiers and public servants of various sorts, while the rayat has no compensating source of income in the new transport service............and old industries, apart from agriculture which employed millions all over the country, are being gradually destroyed by foreign competition, which has been actually facilitated by taxes to the amount of thirty millions sterling squeezed out of the rayat's own pocket to pay for improved communications euphemistically called opening up the country to free trade."—A. K. Connel: The Economic Revolution of India.

of raw products precluded healthy economic development and brought about stagnation and deterioration. The rayats and craftsmen were left to fight the economic revolution in the best way they could. In England they won ; in India the battle has been lost. Population grew at a rapid pace, but its productive capacity did not show a corresponding increase. The English-educated classes found employment in subordinate government service in the earlier years, and latterly they have crowded the learned professions, with the result that the door of remunerative employment is shut in their faces. The artisan and working classes too, like other sections of the population, were confronted with the problem of unemployment. Leaders of Indian thought were driven to attribute this state of things to the material and the moral 'drain' which was associated with British rule in this country.

The public works policy of Government, which was directed to the rapid construction of railways and other means of communication and the use of big steamers for the conveyance of goods and of the Suez Canal as the trade route to India, joined to the mistaken enthusiasm of Government for free trade which was utterly unsuited to the condition of India, aggravated the situation; and it will take years to foster a counter-revolution in the conditions which developed in the course of the nineteenth centnry. The self-interest of British manufacturers saw nothing wrong in this exploitation of India, and economists lent the support of their theories to the self-complacency of rulers who congratulated themselves and the country on the economic progress which they strove to promote. It has been shown in previous chapters how growing population has been pressing upon the soil, how farming is being carried on in an uneconomic way, how the long-established domestic industries have been disorganized and their place has not been effectively taken by other forms of wealth-creation and how unemployment, under-production and under-feeding are sapping the vitality of the people. This is a veritable economic revolution in the life of the community.[1]

1 " In some parts of India, this change in the relation of the people to the land has taken place before our own eyes. Thus in Bengal, there was in the last century more cultivable land than there were husbandmen to till it. A hundred years of British rule has reversed the ratio; and there are now in some districts more people than there is land for them to till. "—W. W. Hunter's British Empire, page 85.

But famine and poverty were believed to be natural calamities; disproportionate growth of the population was put down to the stupid social customs of the people; economic maladjustment was attributed to individual and collective lethargy; foreign trade flourished, railways were extended, new and heavier taxes were levied, the currency system was changed, prices steadily rose and public finance was made prosperous. The administrators saw everything that they had made, and, 'behold, it was very good!'

123. Theory of Exchange:—The whole theory of international trade is based on the reciprocal advantage exchange confers on nations trading with each other. A division of labour thus arises among nations which begin to specialise in particular industries for which they are best fitted owing to natural or acquired advantages. In the early stages of their economic development, families and nations were, more or less, self-sufficient. But this self-sufficiency was found to be wasteful, and specialization was gradually substituted for it. By concentrating its energies and resources upon the production of goods which it can produce at the least cost and exchanging them for commodities which are produced under similarly favourable conditions by other nations, a community benefits itself and those nations because production takes place under the most economical conditions and the benefit is shared by all. From the point of view of pure individualistic economic theory, international, like internal exchange, is obviously beneficial. International exchange is only the extension of the exchange between individuals, districts and provinces of the same country. Two nations exchange products with each other because that operation confers an appreciable benefit on both. Trade arises between countries, as between individuals, on account of the relative and not the absolute advantage that results from it. Comparative costs constitute the underlying principle of trade, and specialisation reduces production costs. England may produce wheat more cheaply than Russia, but she will produce other articles still more cheaply and will, therefore, exchange the latter for wheat imported from Russia. Japan imports a large quantity of raw cotton from India and on the same principle, exports to this country an increasing proportion of cotton manufactures in competition with the locally made articles.

The doctrine of the beneficence of exchange is, however, subject to important limitations in its application to actual conditions. The question will be dealt with at length in the next

chapter. It is sufficient here to point out that free international exchange may, under certain circumstances, lead to economic development that is undesirable from more than one point of view. In the first place, " the so-called system of the territorial division of labour by which the orthodox economists assign to the backward torrid zone regions of Asia the duty of producing raw materials and claim for the advanced European temperate zone countries the work of transport and manufactures, as a division of labour in production which is fraught with the highest advantage to all and is almost a providential dispensation, against which it would be foolish to rebel,"[1] is not such an inevitable necessity or a beneficent arrangement. Secondly, the process of the change of the division of labour creates unemployment and distress among large numbers of people whose loss is not made good by gain which may accrue to a few others. Thirdly, the economic readjustment which follows such an international division of labour does not stand upon the same footing as the changed tendencies of exchange between individuals, classes and communities within the same political unit. Within a country, what one part loses another gains; they supplement and co-operate with each other. There is internal migration and a readjustment of distribution. But this does not happen in international trade. Emigration is not free and easy, and the distribution is not fair and equitable. The cosmopolitan ideal militates against the nationalism of peoples who are anxious to conserve their industries in the midst of international competition and struggle for supremacy. Fourthly, the ruin of a nation's industries caused by free international exchange, may be an exhorbitant price to pay for the advantage of obtaining foreign commodities cheap. The loss in productive power may be much greater than the gain represented by cheapness of foreign goods secured in exchange for home produce. Lastly, though it is true that commodities will not be exchanged unless the parties concerned secure benefit therefrom, the advantage may be temporary and illusory, being counterbalanced by serious detriment which is not equally and immediately obvious. The cultivator in Berar, for example, has extended cotton cultivation at the cost of jawar, with the result that while he obtains more cash by sowing cotton, the production of food for human beings and of fodder for cattle has been reduced. This reacts detrimentally on the condition of the

1. Ranade: Essays in Indian Economics.

community though the disadvantage may not be apparent. After all, trade is a means to an end, and not an end in itself; and a nation has to see to it that international exchange leaves a balance of permanent good to its people as a whole.

124. Effects of the Revolution:—Without anticipating the discussion of the problem of protection, which is dealt with in the next chapter, and while explaining the effects of the growth of foreign trade, we have to point out how in the case of India, the purely economic revolution ushered in by the establishment of active commercial relations with the outside world, went on side by side with far-reaching changes in the social and the administrative system of the country. Being deprived of its share in government, the middle class lost its enterprise, initiative and energy; and considerable wealth was taken out of the country for the support of European civil servants and soldiers. But the *laissez faire* doctrine was in the ascendant, the claims of Indians to equality of opportunity in their own country, were ignored, and the trustees who managed India's affairs for the good of her people were content blindly to trust natural laws, freedom of exchange and unrestricted competition to work themselves out, without noticing the ruinous consequences of their policy. Even dire famines, diseases, starvation and heavy mortality and the pronouncements of Famine Commissions did not rouse them to action. Industrial skill deteriorated, the peasantry was impoverished, the middle class declined in influence, indebtedness grew and there was an all-round weakening of the muscles of enterprise and production.[1]

1 "We are often told that one of the advantages of the expansion of our import trade is that we get our supply of manufactured articles much cheaper and better than we can have ourselves with our present means and appliances. This is true enough and is no doubt our gain as *consumers* but what a price are we paying for this, as *producers* and *labourers*? Our home manufactures are almost now gone down and this collapse means to us much more than is commonly supposed. (Istly) It means to us the disruption of our industrial organization and a change from a many-sided system to one resting on the basis of a single industry; (2ndly) it means to us the transfer, enforced, compulsory transfer of one half of our industrial population from fields of *skilled* labour to fields of *unskilled* labour involving as its necessary consequence a distinct deterioration in their standard of life and comfort; (3rdly) it means to us a fearful falling off in the condition and resources of the middle classes, who are the backbone of every fairly progressive community; (4thly) it means to us a dangerous contraction of the total national provision for a growing population; changes all of a grave and wide-reaching character amounting to a most disastrous economic revolution highly detrimental to the moral, social and intellectual well-being of the entire nation."—G. V. Joshi's Writings and Speeches, page 651.

There has been such a strong revulsion in the mind of economic students against the rigidity of the theory of international exchange referred to above, that even in England, the stronghold of orthodox views on this question, many conversions have taken place lately to the other side which emphasises the view of national, racial and imperial considerations so often ignored by abstract reasoners. A writer observes :—" And the practical conclusion of it all is, (and it might be inscribed as a maxim over a nation's portals in letters of gold, that in the game of commerce which is being played between nation and nation—" Never sacrifice an instrument of production to a foreign nation for the sake of merely cheaper products of the same kind of instrument but better which they possess but which you do not; but do as you do at home and sacrifice it only to the acquirement of the *superior instrument of production itself*, which cheapened that product—if you can get it."[1] In the industrial revolution which occurred during the last century in India the indigenous producers lost their instruments. They had no opportunity to adjust themselves to the new conditions, and their loss was not the gain of the other classes in the country but went to strengthen the economic position of foreign nations, they themselves being left to drift helplessly and be stranded on the rocks and shoals of economic ruin. The lessons taught by the experience of the world war to England where conditions are peculiarly favourable to a policy of free trade and the action taken by the British Government in connection therewith, throw an interesting light upon the unwisdom of the policy of Indian rulers regarding our industries and trade for over a century. The relation of trade to industries has been effectively brought home to the mind of the government in this country only during the past few years. The reader will have perceived the bearing of the discussion of this subject here on the view we have propounded[2] that Economics is a social science which has to deal with men as members of a community, bound together in a nation and a State and not merely as individuals each pursuing his private aim of personal gain.

125. Trade Statistics:—The characteristic features of India's foreign trade have been summarised in a preceding section; and we may now proceed to illustrate them by giving a few statistics. An effective demand abroad for India's raw produce and food stuffs

1 Beatie Crozier: The Wheel of Wealth.

2 See Appendix to Chapter II.

gives rise to this exchange; and payment for the exported goods is received by this country in the shape of manufactures and the precious metals. Cotton, jute, oilseeds, rice, wheat, tea and hides and skins constitute the staples of export; while cotton cloth and yarn, machinery, railway plant, sugar, motor vehicles, mineral oil, hardware, paper and matches represent the bulk of the imports. In order to indicate the nature, the size and the direction of foreign trade it will be convenient to show the shares of the principal articles of import and export and of the countries with which the trade is carried on:—

I—Principal Articles.

(A) IMPORTS (PERCENTAGE OF PROPORTION TO THE TOTAL IMPORTS OF MERCHANDISE)

	1909-14 Average	1914-19 Average	1921-22	1923-24	1925-26	1927-28
Cotton and Cotton Manufactures	35	36	21	29	29	28.7
Iron and Steel and other Metals	7	6	8	8	8	11.3
Machinery and Mill work	4	4	13	8	7	6.3
Sugar ...	9	10	10	7	7	5.9
Railway Plant ...	4	5	7	5	2	1.9
Hardware ...	2	2	2	2	2	2.1
Mineral Oil ...	3	3	3	4	4	4.4
Silk, raw and Manufactures	2	2	2	1	1	2.0
Other Articles ...	33	33	34	36	40	38

(B) EXPORTS (IN PERCENTAGES OF TOTAL VALUE)

	1909-14 Average	1914-19 Average	1921-22	1923-24	1925-26	1927-28
Jute, raw and Manufactures	19	25	24	18	26	26.4
Cotton, raw and Manufactures	15	16	19	31	28	17.7
Food grains, pulses and flour	21	17	5	15	13	13.4
Seeds ...	11	6	8	9	8	8.3
Tea ...	6	8	7	9	7	10.1
Hides and skins, raw ...	7	8	12	2	2	2.7
Other Articles ...	21	20	25	16	16	22

II—Distribution of Indian Trade (1927–28.)

	Exports	Imports	Net Imports (–) or Net Exports (+)
	Crores of Rs.	Crores of Rs.	Crores of Rs.
United Kingdom ...	82	119	– 37
Other British Possessions ...	50	17	+ 33
Total British Empire ...	132	136	– 4
Europe ...	88	48	+40
U. S. A. ...	37	20	+17
Japan ...	29	18	+11
Other Foreign Countries ...	43	28	+15
Total Foreign Countries ...	197	114	+83
Grand Total ...	329	250	+79

III—Trade with Principal Countries.

(A) IMPORTS (IN PERCENTAGES OF TOTAL)

	1913-14*	1925-26	1926-27	1927-28
United Kingdom ...	64.1	51.4	47.8	47.7
U. S. A. ...	2.6	6.7	7.9	8.2
Japan ...	2.6	8.0	7.1	7.2
Java ...	5.8	6.2	6.2	5.9
Germany ...	6.9	5.9	7.3	6.1
Belgium ...	2.3	2.7	2.9	3.0

(B) EXPORTS (IN PERCENTAGES OF TOTAL

United Kingdom ...	23.4	21.0	21.4	25.0
U. S. A. ...	8.7	10.4	11.1	11.1
Japan ...	9.1	15.0	13.3	8.0
France ...	7.1	5.5	4.5	4.9
Germany ...	10.6	7	6.9	9.9
Belgium ...	4.8	3.2	2.9	3.3

The relation between exports and the estimated total production of certain principal crops is given in the following table:—

Percentage of Exports to Production.

Crop.	Pre-war Average	War Average	Post-War Average	Year 1924–25	Year 1927–28
Rice ...	9	5	5	7	8
Wheat ...	14	9	3	18	4
Tea ...	96	89	95	91	90
Indigo ...	40	44	27	16	17
Rape and Mustard ...	23	8	19	23	8
Linseed ...	73	63	59	69	63
Sesamum ...	25	8	6	6	2
Groundnut ..	35	12	19	27	24
Cotton (raw) ..	56	51	61	55	46
Jute (raw) ..	51	31	48	48	47

PRINCIPAL CLASSES OF ARTICLES.

I—Imports (Crores of Rs.)

	Pre-War Average	War average	Post-War Average	1924-25	1927-28
1 Food, drink and tabacco ...	21·8	26·0	37·8	36·4	37·2
2 Raw Materials : Produce and Articles mainly unmanufactured ...	10·0	9 8	19·0	21·0	25·5
3 Articles wholly or mainly Manufactured ...	111·7	108·2	192·5	185·5	182·6
4 Living Animals ...	4	·5	·2	·3	·3
5 Postal Articles not specified ...	1·6	2·7	4·4	3·4	4·0
Total ...	219·4	147·8	254·0	240·6	249·8

PRINCIPAL CLASSES OF ARTICLES.

II—Exports (Crores of Rs.)

1 Food, drink and tobacco ...	62·9	59·5	59·6	105·4	83·8
2 Raw Materials and Articles mainly Unmanufactured ...	104·6	86·4	145·9	192·0	144·3
3 Articles wholly or mainly manufactured ...	50·6	68·4	77·9	84·2	87·5
4 Living Animals ...	·3	·2	·3	·3	·4
5 Postal Articles ...	·9	1·3	2·5	2·6	2·9
Total ...	219·4	215·9	286·3	384·6	319·1

The vaules of principal articles of import and export are separately shown in the following tables :—

I—Imports (In Crores of Rs.)

	Pre-War Average	War Average	Post-War Average	1924-25	1927-28
Cotton, raw ...	1·0	·4	2·1	4·2	6·7
Cotton yarns and manufactures ...	52·21	52·38	71·1	82·3	65·1
Iron and Steel and manufactures ...	12.4	10·1	21·3	18·9	21·4
Sugar ...	12·9	14·5	19·5	20·9	14·9
Machinery ...	5·6	5·1	21·6	14·1	15·9
Oils, vegetable, mineral and animal ...	3·9	4·2	8·2	9·6	11·0
Railway plant and rolling stock ...	4·8	2·9	10·5	6·0	4·7
Cutlery, hardware &c. ...	3·1	2·7	3·7	4·9	5·2
Vehicles (excluding locomotives for railways) ...	1·74	1·62	6·2	4·41	7·6
Paper, paste board and stationery ...	1·82	2·02	3·4	3·0	3·0
Soap ...	·7	·9	1·7	1·3	1·6
Provisions and Oilman's Stores ...	2·2	2·3	3·1	—	6.4

II—Exports (In Crores of Rs.)

Cotton, raw and waste ...	33·27	36·68	64·73	91·22	47·72
Jute, raw ...	22·20	12·80	19·5	29·0	30·6
Cotton, yarns and manufactures ...	11·40	11·72	17·7	11·28	8·6
Jute „ „ ...	20·24	40·19	43·16	51·76	53·5
Grain, pulse and flour ...	45 81	37 41	32·82	65·0	42·9
Tea ...	13·06	17·54	20·92	33·39	32·4
Seeds, including oil nuts ...	24·36	12·17	23·53	33·16	26·6
Hides and skins, raw ...	10·31	9·88	9·45	6·77	8·8
„ „ tanned or dressed ...	4·29	7·19	6·24	7·28	9·19

126. Advantages of Trade:—The fact that the large bulk of the imports and only a small proportion of the total exports of merchandise consist of manufactured articles, is a positive proof that Indian people lack the opportunities, the aptitude, the enterprise, the capital, the skill and the organization that are required to turn the indigenous raw materials into finished products. It represents so much loss of productive power and dependence on a single industry which is subject to the operation of the law of diminishing returns. The expanding imports of manufactured goods and the growing exports of raw products are often taken as a welcome indication of the steadily increasing purchasing power of the people, and therefore, of material prosperity. This may be true of a newly settled and sparsely populated country where land is abundant, and farming and cattle-breeding are profitably carried on. But as applied to India, the conclusion is subject to important reservations because the character of its import and export trade also means the displacement of the indigenous industries by foreign manufactures and the inability of indigenous enterprise and labour to keep pace with economic needs and development. Jute manufactures and tea which bulk so large in the export statistics do not, besides, owe their prosperity to Indian capital and enterprise and cotton yarns and manufactures which do, have shown a decline instead of expansion on the export side.

The volume of foreign, like internal trade, depends upon the nature and the size of indigenous industries, agricultural and manufacturing,

the comparative costs of production and the relative purchasing power of exchanging nations. It is a common and indeed an uninstructed belief in all countries that imports of manufactures and exports of raw materials are detrimental to the best interests of a community. There is similarly a strong prejudice in the popular mind in India that foreign trade has proved the ruin of this country. This notion is partly based upon the fallacy which sees advantage accruing only to one of the parties to an exchange transaction and looks upon exports as goods thrown away without a return and imports as a tribute levied by the foreigner. But a moment's reflection will show that though false as a generalization, it is not, in certain conditions, without a substantial basis of truth. Excessive or increasing exports are not always a sign of prosperity as growing imports may not be an indication of indebtedness and poverty. In the case of India, the expanding exports of raw materials represent, in large part, the payment of various kinds that have to be made abroad. They consist of the Home Charges, payment of interest and remittance of profits by foreign bankers, merchants and manufacturers carrying on business in this country. Little of the foreign trade of the country is in the hands of Indians and the gains of European shippers, planters, miners, bankers, millowners &c., sent abroad, take the form of commodity exports, for which there is no return. A portion of these profits coming back to be invested in industrial and commercial enterprise is, in effect, foreign capital not controlled and used by Indian industrialists. India's foreign trade will be decidedly profitable to her people if a larger part of the raw materials were worked by them in the country and the profits of industry and trade remained in their hands.

These are considerations which ought not to be ignored in drawing conclusions from export and import statistics of India; nor should the disadvantages of foreign trade be, however, exaggerated. The country must import articles which it wants and yet can not produce or produce cheaply, and must export indigenous products which are relatively plentiful and for which there is a demand in foreign markets. Indian staples like cotton, jute, tea, oilseeds, hides, rice and wheat command high prices abroad, and we can buy with these exports a larger variety and quantity of foreign goods, conducive to the progress and comfort of the people. The purchasing power and, therefore, the wealth which the sale of raw and manufactured jute

brings to the cultivator in Bengal and of cotton to Bombay and Berar, is undeniable and production of these in large quantities itself turns upon the possibility of a market for the output. The very progress of indigenous industries requires machinery which can not be manufactured in the country and has to be imported from abroad; and as imports of such a beneficent character have to be paid for by exports, a restriction of either will obviously hamper economic development. The same is true of social, cultural and political progress which calls for the import of articles of foreign manufacture. If increased exploitation of indigenous raw materials, e. g. sugar cane and cotton, leads to restriction of foreign trade, the result will not be unwelcome. As a matter of fact, increased internal industrial activity stimulates, instead of reducing, trade because it augments general economic power. It is obvious that the export of fully or partially manufactured articles gives more employment to a people than that of raw materials. As regards recent developments, when allowance is made for the increased prices of the imported articles which are purchased with the exports of steadily growing aggregate value and for the fact that these profits are, to a considerable extent, intercepted by merchants, shippers, bankers and other middlemen, it must be admitted that the people as a whole, including cultivators, who grow the commercial crops, have derived only a limited advantage from foreign trade. The producer has been indeed able to make some unexpected gain during the past few years, through increased demand for his staples and high prices, though his cost of production and of living has gone up all round and has thus partially offset the betterment. It may, therefore, be concluded that foreign trade must not be commended or condemned merely on a superficial view of import and export statistics; and its character, beneficial or otherwise, must be judged on the evidence of a balance of advantage or disadvantage to the country's interest taken as a whole.

127. Balance of Trade:—International trade is, in the ultimate analysis, mere barter : exchange of goods for goods or services, the precious metals being remitted or credit given for the balance. India does not receive payment for the whole quantity of her exported merchandise in the shape of merchandise imports; and the balance due to her is paid, in part, in the form of precious metals because these are in demand in the country as merchandise for use in

jewellery and because it is a cheaper and a more convenient means for foreign countries to liquidate their debt to this country. A portion of the balance is, in effect, retained abroad to meet India's obligations in Great Britain. On account of the volume of silver which has flowed into the country for years, India has been called a 'sink of silver,' and her imports of gold before and after the war, have attracted the attention of the whole world, owing mainly to the peculiar importance of the yellow metal to the banking and currency systems of western nations. India's 'favourable' balance of trade is an important characteristic of her economic, financial and currency organization. The normal excess of exports over imports arises chiefly from a steady demand for India's raw materials for use in foreign manufactures, e. g. raw cotton in Japan, and India's position as a debtor country and her standing obligation to meet the 'home charges.' The balance remained high even during the war as a result of reduced imports and the controlled large exports of goods badly required to assist the prosecution of the war, higher prices of commodities making up for quantitative decrease. The following figures represent the comparative values of the exports and imports of merchandise on private account during the pre-war quinquennium, the five years of the period of war and the post-war years :—

Excess Exports (Private Merchandise, including re-exports)

(IN CRORES OF Rs.)

Years	Exports	Re-exports	Imports	Balance
Pre-War Period (1909—1914)	219·5	4·6	145·8	78·2
War-Period (1914—1919)	215·9	8·1	147·8	76·3
Post-War Period (1919—24)	286,3	15·6	248·8	53·1
1924—25	384·6	13·5	243·1	155·0
1925—26	374·8	10·4	224·2	161·1
1926—27	301·4	8·0	229·0	79·4
1927—28	319·1	9·5	246·7	81·9

On the close of the war, came the boom, and the pendulum of the trade balance violently swung from an excess of exports to an excess of imports; and normal conditions were slowly restored only

after the expiry of two years. We shall deal at length with the nation's account of debits and credits in the chapter on foreign exchanges where the 'invisible' imports and exports will be taken into consideration and a final national balance sheet will be drawn up. It is enough for our present purpose to confine ourselves to the balance of trade, in which account is taken almost exclusively of the 'visible' items of trade in imports and exports. The recovery of the normal balance mentioned above, is brought out in the following table in which *plus* (+) signifies net export and *minus* (—) net import :—

Visible Balance of Trade.

(IN CRORES OF RUPEES)

	1922-23	1923-24	1925-26	1926-27	1927-28
Exports of Indian merchandise (Private)	+299·1	+348·8	+374·8	+301·4	319·1
Re-exports of foreign merchandise (private)	+15·1	+ 13·3	+ 10·4	+ 8·0	+ 9·5
Imports of foreign merchandise (private)	— 224·3	— 217·3	— 224·2	— 229·9	— 246·7
Balance of trade in merchandise (private)	+90·0	+144·8	+161·1	+ 79·4	+ 81·9
Gold (private)	— 41·8	— 29·1	— 34·8	— 19·4	— 18·1
Silver („)	— 18·1	— 18·3	— 17·1	— 19·7	— 13·8
Currency Notes (private)	— ·9	— 1·0	·01	— ·01	— ·02
Balance of transactions in treasure (private)	— 60·2	— 48·6	— 51·8	— 39·3	— 32·1
Total visible balance of trade	+ 29·75	+ 96·2	+109·2	+ 40·1	+ 49·7

128. India's Alleged Gold-Hunger :—The normal excess of exports over imports of merchandise is paid to India, so far as it is not set off aganist 'invisible' imports, in the shape of services of various kinds, through the Secretary of State's drawings, the Government of India's purchase of sterling bills and the imports of the precious metals; and large quantities of gold, along with those of silver, have thus been recently absorbed in this country. We give below figures representing the imports of the precious metals into the country. During war, the belligerant countries put embargoes upon the ex-

ports of these metals of which the supply was hopelessly inadequate to the insatiable demand created by the enormous expenditure of governments, and trade finance was rendered difficult. The Indian government, as will be shown in detail in a later chapter, imported huge quantities of silver into the country to satisfy the unprecedented demand for rupees which had to be put into circulation in order to provide the currency required by prevailing high prices and the huge war disbursements. It also imported gold, for the same purpose, in 1920-21, to the tune of Rs. 11 crores. Just after the close of the war, as has been pointed out above, India's position with respect to the normal favourable balance of trade, was suddenly reversed, and in the course of the two years 1920-21 and 1921-22, India exported gold of the total value of Rs. 38 crores! The following table shows the imports and exports of gold and silver on private account, for a series of years:—

Private Trade in Gold & Silver (In Crores of Rs.)

	Gold		Silver		Net Imports(-) Net exports (+): Gold & Silver.
	Imports	Exports	Imports	Exports	
Average of Pre-War Period.	32·7	3·9	10·8	3·6	—36·0
Average of War Period.	10·6	2·9	4·5	1·7	—10·4
Average of Post-War Period.	21·5	9·0	14·1	2·6	—24·0
Year 1924-25	74·2	·3	24·2	4·2	—93·9
„ 1925-26	35·2	·3	19·8	2·7	—52·0
„ 1926-27	19·5	·1	21·6	1·8	—39·1
„ 1927-28	18·1	·0	16·4	2·5	—31·9

During the nineteenth century, when India had the silver standard, she imported the white metal in larger quantities than the yellow, but since the introduction of the gold standard in the beginning of this century, the country has shown greater favour to gold. The heavy imports of the precious metals into India is an interesting economic paradox as it appears to be incompatible with the poverty of her people. But in view of the large population of the country, its illiteracy and economic backwardness, its lack of opportunities for industrial progress, its system of currency and

exchange and its very poverty, this absorption of gold and silver is not to be wondered at. It must be admitted that people will derive immense benefit if the gold could be used as capital for the industrial development of the country.[1] If the gold hoard of Rs. 142 crores mentioned in the foot note, had been smoked away in foreign cigars, drunk away in imported liquor or used in buttons and watch chains would the critic have objected ? Probably not. This subject has been already dealt with on a preceding page and more need not be said with regard to it in this place. The precious metals are used in considerable quantities in the 'arts' in all the countries of the world, advanced as well as backward, and there is no reason why Indians should not be allowed, without adverse comment, to consume, per head, gold and silver, in amounts which are taken by people elsewhere. The additions which the U. S. A. made to its stock of gold during the war, the ease with which that nation released 300 million ounces of silver for the use of Great Britain and India, its reported post-war gold holdings worth 1,200 crores of rupees and the recent gold drawings of France from the Bank of England at the cost of considerable embarassment to the latter, are facts which should be noted in this connection. It is the world's currency demands that are chiefly responsible for the complaints against India's absorption of the precious metals, chiefly gold.

Some of the gold coming into the country is, even under existing conditions and in the absence of good banking, probably used for productive purposes. But the users are so scattered and the amounts falling to their lot are so small that the gold does not make much impression on the industrial situation. Much of the imported gold is undoubtedly used for jewellery, but it is an unjust exaggeration to harp upon India's insatiable hunger for gold. With reference to the allegation that 'an undue proportion of the

1. "It would seem that India is hoarding more than formerly, if by hoarding is meant the non-productive use of the yellow metal. It is used chiefly in the form of ornaments, and as is well-known, most of the gold is imported in small bars to meet a demand in the same way as piece-goods are imported...This accumulation of the precious metals is far greater than would be necessary to develop the railways, schools, colleges &c. which are required at the present time. If the gold absorbed in each year had been invested in railways at the ordinary rate of 4 per cent, the interest alone would amount to Rs. 13 crores per annum or in the aggregate to over Rs. 142 crores. Had this been so invested there would have been a great increase in production with a very considerable increase in well-being."—Review of the Trade of India for 1913-14.

world's gold supply is absorbed by India,' the Babington Smith Committee on Indian Currency came to the deliberate conclusion that the quantity of gold taken by India, was not disproportionately large in relation to her economic condition.[1] The imports of gold have been on a comparatively small scale during the last few years, as the table on the preceding page will show. The net imports declined in 1926–27 to Rs. 19·4 crores and in 1927–28, to Rs. 18 crores, as compared with Rs. 34·8 crores in 1925–26.[2] The aim of Government's currency and banking policy in India has recently been the demonetisation of gold and the discouragement of its non-monetary as well as monetary use.

129. Conditions of Beneficent Trade:—The advantages of exchange and the value of the services rendered by traders to producers and consumers, have been pointed out in a preceding section. The degree of benefit conferred by trade will, however, depend on the nature of its organization and on the methods by which it is carried on, as these determine its effects on industries and the material well-being of communities. From this point of view, the remote and imperceptible consequences of trade, external and internal, are more important to a nation than the immediate advantages. Well-organized trade creates markets for goods which would not be produced without it or would be wasted; and its contribution is thus equivalent to the production of additional wealth. What is the social cost of external and internal trade, is a question that merits careful consideration. The close contact into which India has been brought with the producing and consuming centres of the world is the source of a distinct gain. If Indian exports enable the people to buy more of foreign commodities which are calculated to contribute to their progress and well-being, foreign trade must be a blessing, and the expansion of this trade is to be welcomed and fostered. This elementary principle is undeniable.

1 Report, para 63.

2 The Review of the Trade of India for 1927–28 has the following comment on this point:—"The 1924–25 imports were exceptionally large as the gold value of the rupee was high and, consequently, prices were low. In 1925–26 also this reason operated to some extent and imports were fairly high, but in the last two years the demand has fallen off considerably. In normal conditions, it seems unlikely that India's absorption of gold will recover again the pre-war level as the investment habit is growing in India."

The chief point, however, which has to be considered here is whether, without any diminution of external trade, there will not be greater production of wealth and a larger number of people will not benefit if some of the raw materials now exported to foreign countries to be received back in the form of manufactured articles, could be utilized in India and gave scope for the development of the talent, skill and enterprise of Indians themselves, thus increasing their purchasing power and capacity to absorb imported goods. Were it not for this aspect of the question, there would be no international struggle for the capturing of markets, pushing and dumping of manufactures and a keen struggle for the safeguarding of national industries.

Modern machinery of trade is so extensive and complex that in many respects it robs the freedom and ease of exchange of its beneficent character. As an occupation, trade offers great attractions to people and there is intense competition among traders of different grades to secure its gains. While this competition makes for cheapness, on the whole, it tends likewise to the creation of rings, monopolies, adulteration and the fixing of prices at high levels to the detriment of the consumers. It appears as if greater activity is shown in the distribution than in the creation of wealth, and the consumer has to pay a higher price for the services of traders than he may reasonably be expected to do. Wholesale dealers in large towns and commercial centres are now well organized, and trade in various commodities is specialized. Concerted action is taken for the protection of their own interest by bodies of merchants. There are thus numerous associations, all-India, provincial and local, like the European and Indian Chambers of Commerce, the associations connected with trade in piece goods, cotton, jute, wool, rice, sugar, tea, grains, hides and skins, iron and steel, paper, matches and associations of persons engaged in trade in general. Retail traders are not so organized though they arrive at some kind of understanding as regards such matters as prices in places where there is competition. Producers and wholesale dealers have to engage the services of brokers, 'Adatyas' and 'Dalals' and other classes of middlemen like the guarantee brokers or the 'banians' on Calcutta side, whose remuneration adds to the price the consumer has to pay or reduces the price which the producer should have received, according to the state of supply and demand. Customs of trade

vary, but the middleman seems to have made himself indispensable, almost everywhere, and the small producer and consumer are at his mercy.

Through railways and ocean-going steamers, the Indian cultivator has been brought into close touch with foreign markets. But between him and the foreign consumer stand a number of middlemen who eat into his profits. There are many villages in India which still enjoy their splendid isolation as of yore. They consume what they produce and produce what they consume. There is little surplus produce to dispose of and there is likewise no effective demand for outside goods. Means of communication are wanting or are defective and the people live in a world of their own, their horizon being limited to an area of a few miles around. But the interior is now everywhere being slowly penetrated by the trader who carries off to the commercial centres all the produce which is in demand elsewhere in the country or abroad. Producers of raw produce and food grains are poor, ignorant and unorganized and can not make the best of what they can offer for sale. The cream of the trade is carried away by the exporters and shippers who are armed with extensive resources and employ a large number of agents; and the middlemen also levy their tribute and the cultivator has to be content with what he is paid. This state of things is changing but slowly and the districts swarm with traders and their agents who are out to make profit even by speculation. Merchants perform a double function and are often divided into classes according to their special lines of business. They collect raw produce and procure and distribute manufactured goods. The quantity of the latter is comparatively small and the armies of middlemen are more concerned with raw materials and food produce.

130. Trade Organization :—Take trade in raw jute as an example. The cultivator sells his stuff to a 'bepari,' or petty dealer who has received advances from a 'mahajan' or broker (arathdar). The latter sells to the representative of a large exporting firm or mill and the prices are regulated by the condition of the market, external and internal. The "higgling of the market" is generally one-sided, and the buyer generally scores over the seller. Cotton, wheat, oilseeds, hides, the staples of our export trade, are all handled in the same way. They are rushed along the high roads and by rail and river to the

big ports of Calcutta, Bombay, Madras and Karachi, and an extensive machinery is employed for moving the crops to their destinations. Some of the prominent towns, conveniently situated in each district, become the collecting centres for agricultural produce which is carried in carts and bundles by the cultivators for sale. Goods so brought to the local merchants, are weighed and are immediately paid for at the current prices, quotations for which are daily received from the ports. Agents of exporting firms are on the look-out for raw materials and food produce which are in demand abroad and put these on the rails at convenient points, all leading to the large ports for shipment to foreign countries. It is through the ports that foreign manufactures are received by wholesale dealers and distributed over the interior along rails, rivers, and roads and they are passed into consumption by the retailers in towns and villages. The shipper, the insuring company, the banker, the importing agent or wholesaler, the broker—all play their specialized function in modern trade organization. The large quantities of raw materials which have to be collected from a vast number of small producers scattered over an extensive area, seem to necessitate, in export trade, the employment of armies of middlemen. But there can be no doubt that the intermediary is an evil and the producers have to organize themselves into selling agencies, preferably on the co-operative principle. As matters stand, the ordinary consumer, no less than the cultivator, is at the mercy of the 'Adatya' or 'Dalal.' Co-operative sale and purchase are being established in a few places, and in that direction lies salvation. As a buyer or seller, the ordinary rayat or artisan has to accept what prices and qualities are offered and the cheapening of the services, if not the elimination of the middleman, is the urgent problem of the day. The financial side of the mechanism of trade, external and internal, will be dealt with in a later chapter.

What has been stated above with reference to the organization of export trade applies on a smaller scale to internal trade and to trade in imported commodities. The small producer and consumer lack credit and can not negotiate business on favourable terms. Hence the need of the middleman like the guarantee broker who assumes financial risks and receives remuneration therefor. The broker meets the convenience of both the seller and the buyer. The manufacturer or the wholesaler is saved the trouble and the ex-

pense of dealing with small consumers; and the latter benefit by the credit they are able to obtain through the broker. The middleman often advances money to the producer who is, on that account, tempted to accept lower prices for his goods. The retail trader secures similar accommodation from the wholesaler. The manner in which consumers in cities and large towns are supplied with commodities brought from hundreds of miles, is truly remarkable. Even perishable commodities like vegetable, fruit, eggs and betel leaves are taken over hundreds of miles from rural producers to urban consumers. This extension of markets has, in certain instances, led to higher local prices and in others to their equalization. Current prices of staples like wheat, rice, cotton and sugar are now governed by world forces. The size of the American cotton crop raises or depresses the price of Indian cotton, and the same is true of other commodities, in which sales for delivery months ahead are common. The sensitiveness of prices to changes taking place abroad is transmitted from exporting or consuming centres to the country side. The telegraph and the post office are the vehicles through which the rise and fall of prices are communicated all over the country; and the forecasts of crops published by Government and by newspapers, have assumed great importance in trade transactions in India.

131. Improved Marketing:—The co-existence of ancient and modern methods, with the predominance of the latter, is a characteristic which distinguishes trade, like other economic activities, in the India of to-day. Markets for cotton, jute, piece goods, tea and other staples in the bigger cities are organized on up-to-date lines and vie with those of western countries. The cotton exchange, the share bazar and the sales of tea by auction are examples of the systematic manner in which wholesale dealings are regulated and effected in the larger markets.[1] At the other end of the scale is the bazar, the petty dealer and shopkeeper and the barter of the smaller towns and of rural areas. Seriously handicapped by a lack of the

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1 "Cotton markets in the Maratha plain country (in the Central Provinces) are highly organized and generally well-managed. The price in Bombay is notified by telegraph and rapidly becomes known to all sellers and purchasers and the wealthier cultivators frequently hold up their stocks for long periods in the hope of a rise in market, and the official forecast of the American crop even is understood and discussed."—Census Report, 1921, Page 263.

knowledge of market conditions, of finance and staying power and of easy means of transport as also by the small quantities of produce he has to dispose of and by the distance between his village and the places of sale, the Indian cultivator has to meet the intelligent buyer and the pofessional middleman on terms which are extremely unfair to him. The Royal Commission on Agriculture in India[1] has painted a vivid picture of the plight of the cultivator in this regard, and while deprecating a wholesale condemnation of middlemen as a class, it has made valuable suggestions with respect to the measures to be taken for the improvement of marketing in favour of the producer who has been so far sadly neglected and whose interests have been, in the main, "left to the free play of economic forces," to suffer in the process. In its opinion, "apart from the organization of producers for the sale of produce, the most effective means of removing unnecessary middlemen are the provision of good roads, and the establishment of a sufficient number of well-regulated markets, easy of access to the cultivator." Lead was given by Berar by providing for regulated markets by its Cotton and Grain Markets Law of 1897, and Bombay has recently legislated for the regulation of cotton markets. In a regulated market, the rules made for fair dealings are enforced by an elected committee, on which the producer as well as the dealer, is properly represented. The Agricultural Commission has made useful proposals regarding the provision of machinery for the settlement of disputes in the markets through arbitrators, the provision of storage accommodation and the utlilization of markets for purposes of propaganda in favour of agricultural improvement and thrift. The encouragement of co-operative sales and auction sales by the Agricultural Departments is recommended in order that the producer may obtain an adequate premium for the superior quality of a new variety of a crop grown under their supervision. Interesting information as to the finance and marketing of cotton is now available in the reports published by the Indian Central Cotton Committee on the fairly extensive investigations into that system carried out under its auspices.[2]

At the last census, 573 persons out of every 10,000, were returned as supported by the trading occupation and about 80,00,000

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1 Report, Paras 323-343.

2 Read "Indian Central Cotton Committee: General Report on Eight Investigations into the Finance and Marketing of Cultivators' Cotton."

out of the whole population were enumerated as actually engaged as traders. More than half of the total number, it has been stated above, are dealers in food stuffs. From the point of view of the consumer, which ought to be the decisive consideration in the matter, the systems and methods of trade prevalent in the country are not efficient. The cost of the middlemen's services, which are valuable in themselves, is too high and hampers the development of trade and the economic progress of the country. Indigenous industries, which admittedly need encouragement, suffer from defective methods of marketing and sale. The tastes and requirements of different classes of consumers are not studied and demand is neither stimulated nor properly met. The trader often poses as the master instead of being the servant of the consuming public and appears, in many cases, to be supremely indifferent to his own interest which lies in pushing his sales. Provincial reports on the last census have brought out these facts in an interesting manner. The report for the United Provinces, for instance, states:—"The rural merchant has little idea of looking for new commodities. Nor have manufacturers the enterprise to advertise their wares in new places. There would seem to be room for organizations to supply to the rural community simple commodities that it can not provide for itself, and that will be really useful to it with business methods of distribution through local agencies."[1] Methods of packing, despatch and payment, are constantly being improved by western businessmen, and Indians have a good deal to learn from them, particularly the organizers of the Swadeshi movement. Owing to defective agencies and methods of distribution, indigenous manufacturers find it difficult to provide for the off-take of their output and this has a detrimental effect upon industrial enterprise. Inadequate finance and small margins of profit are also serious handicaps.

A change for the better is slowly coming over trade systems in cities and towns. Fixed prices, cash sales, show windows, newspaper and other forms of advertisements are now more in evidence there. In the ordinary bazars and petty shops in India a transaction will seldom take place without prolonged higgling, and in the course of these tedious and wasteful negotiations, prices may be brought down by one hundred or two hundred per cent. Weights and measures

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1 Census of India Report, 1921.

which vary from place to place, are another obstacle in the path of exchange. There are maunds and seers of different capacities and a 'hundred' may actually be equivalent to 150 or to 250. Government caused an inquiry to be made into this question in 1913 and in 1922 and declared itself in favour of the ultimate adoption of a uniform system of weights based on the scale in use on the Railways. The Agricultural Commission[1] was strongly impressed with the disabilities under which the cultivator labours owing to the chaotic condition in which matters stand at present in respect of the infinite variety of weights and measures which prevails in the country and with the hampering effect which such a state of things has upon trade and commerce generally. It, therefore, recommends that the Government of India should take up the question once more and lay down general principles to which local governments should adhere in taking action for their own markets. As effective demand for commodities determines the quality, the price and the volume of production, manufacturers have to pay as much attention to the marketing of their output as to the organization of industries. They arrange for the off-take of the goods as they are produced or in anticipation, with wholesale dealers, and securing a profitable market is an important element in the efficiency of business management. The creation and extension of markets is a function which is thus shared by manufacturers and merchants; and both of them count upon the favour of their common patron, the consumer. They must, therefore, be careful about the quality of their goods, that is, 'not only the intrinsic superiority' of the article concerned 'but also the condition in which it is marketed.' The Agricultural Commission has examined the complaints heard about some of the Indian produce marketed abroad, such as adulteration, mixing and damping of cotton, and holds that there is considerable room for improvement in the quality of the exported commodities.[2] Foreign producers and traders send out their agents to study the requirements and tastes of the people of India and export to this country goods of special patterns suited to the wants and pockets of consumers here. The Indian Tea Association spends lakhs of

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1 "In sixteen markets of the East Khandesh district of the Bombay Presidency, the *maund* has thirteen different values ranging from 21½ *seers* at Bodwad to 80 *seers* at Pachora."—Report, para 339.

2 Report, paras 340-341.

rupees out of the tea cess levied upon exports, on the work of popularising the consumption of tea in India and in foreign countries. In the intense competition of to-day, both external and internal, all parties—manufacturers, traders and the general public—stand to gain by improved methods of sale; and the people have even to be educated in the use of certain commodities. The instinctive keenness and the natural aptitude for business possessed by members of certain castes and communities is stimulated and trained by apprenticeship. Most of the successful merchants of to-day have been trained in the hard school of experience and several of them have risen from humble positions of shop assistants and clerks. They did not take long, with their shrewdness and industry, to pick up modern methods of trade. But the need of a theoretical grounding is now being felt and commerce colleges and classes have sprung up in all provinces. Salesmanship and shop management constitute an art that has to be cultivated.

132. Communications and Transport:—The object of wealth-creation is not fully attained till the goods are made accessible to the consumers by being carried, by some means or other, to their destination. The agents of wholesale dealers collect agricultural produce and manufactures in small lots from cultivators and artisans; but these have to be conveyed to the markets. At the earlier stages of economic progress, the transportation was effected by human labour supplemented later by the physical power of bullocks, horses, mules and other animals. Traffic is still carried on in this primitive way in the interior of India and particularly on its borders. Suitable conveyances like carts and wagons were also devised to make it easier for the animals to do their work of carriage. The resistance offered by nature was further overcome by the use of roads specially intended to facilitate travel and transport. The old Indian rulers constructed a few trunk roads which traversed the country like the Roman highways and they built rest houses, planted trees, and dug wells at convenient distances along them. But these were utterly insufficient even for such trade as then existed. In most parts of the country there were only cart tracks and these were not passable over certain distances in the rainy season. Great difficulty was experienced in negotiating mountains and rivers that had to be crossed. Rowing boats for rivers and sailing ships for traffic along the coast and in the ocean were commonly used. For the sake of

security from robbers and thieves traders and those who carried on the transport of goods for them, travelled in groups. Even in spite of the extension of railways and metalled roads to-day, several parts of the country are altogether cut off from the outside world during the rainy season. The Agricultural Commission has quoted comparative statistics showing the relative position of India and other countries in respect of railway mileage, from which we take the following figures:—

Comparative Mileage of Railway.

Countries.	Miles of line per 100 sq. miles.	Inhabitants per mile of line.
U. S. A. ...	8 42	469
Canada ...	1·0	222
India ...	2·2	7,894
Russia in Europe ...	1·5	3,709
Australia and New Zealand ...	0·9	238
Argentina ...	2·0	376
Union of South Africa ...	2·4	605

The following table compares the mileage of roads in the nine major Provinces of India with that in the U. S. A.

Road Mileage in India and in U. S. A.

Density of Population per sq. mile	India 240		U. S. A. 31·5	
	Per 100 sq. miles of area	Per One Lakh of population	Per 100 sq. miles of area	Per one Lakh of population.
Mileage of all roads ...	20·18	84	80·00	2,550
Surfaced roads ...	5·38	22	12·05	383

The share of each Province in the total road mileage depends, to a large extent, on natural, configuration, the density of population and economic development. Inter-provincial comparisons will be misleading unless these factors are taken into account. That the position in India in relation to its means of communication, is

unsatisfactory, however, admits of no doubt. Under these unfavourable conditions, trade was naturally restricted and full use could not be made of the power and means of wealth-production. Plenty and scarcity existed side by side in neighbouring provinces and districts; and existing means of conveying goods were not adequate to distribute the superabundance of the fortunate parts of the country among the unlucky ones.

The distress caused by the famines of the last century was due, in large part, to the difficulty of carrying relief to the suffering people, and if the worst terrors of famine have been mitigated during the past few decades, it is owing chiefly to the extension of the rapid means of transport provided by the railways. It is necessary to realize clearly what this improvement of communications has meant to the country. Its significance lies in the veritable economic revolution it has brought about in the land by breaking up the isolation and the self-sufficiency of village life. Markets have been widened both for foreign and indigenous commodities and the total volume of trade has enormously increased. The competition of European nations for Indian raw produce, was stimulated by the expansion and cheapening of the shipping service, and the opening of the Suez Canal in 1869 was an important factor in the development. Ship-building and shipping activities of these nations have made astonishing reductions in sea freight possible; and cheap ocean freights combined with the network of railways spread over India, have resulted in the steady expansion of the exchange of the indigenous raw produce for the manufactures of foreign countries. A ton of goods is carried between India and Europe for a freight of ten to fifteen rupees while the corresponding charge of railway transport within the country over one-fifth of the distance may be higher. This is a severe handicap for Indian industries, which have to face the competition of foreign manufactures. Several parts of the country are more cheaply reached by the latter than by the indigenous industries; and foreign goods lose their advantage only in the interior where they too have to bear the railway freights. The largest markets for most of the manufactured commodities in whose case such competition prevails, are, however, in the big ports where foreign imports enjoy the advantage of cheap ocean freight; and articles of indigenous manufacture like steel, cement, paper, sugar, glass, pottery, and matches, can not be sold in and round Calcutta,

Bombay, Madras, Karachi and Rangoon at competitive prices. Indian industries which are established in one of the ports, find the local market too small for their output and can not capture the markets in and near the other ports. Transport by coastal steamers to places commanded from the ports renders them no substantial assistance in the face of foreign competition. The destinies of national industries are, in this way, linked to foreign trade and the means of transport—railway rates and sea freights.[1] The problem of improving, developing and coordinating the inland waterways of the country has recently attracted a good deal of attention. These communications played an important part in the nation's transport system of the past, particularly in northern India and especially in Bengal. With the expansion of Railways, they have fallen into neglect and even the Agricultural Commission has drawn attention to the need of putting them on a satisfactory footing. A glance at the position of waterways in Bengal is enough to convince one of the importance of seriously tackling the whole question.

133. Roads and Railways:—The economic principle explained here and in the preceding section, has been specifically applied by the Agricultural Commission[2] to the present position and the needs of agriculture. It states that "defective communications between the point of production and the local market hinder the movement of goods and make primary marketing costly, the additional charge ordinarily falling upon the shoulders of the cultivator," that distances can, in effect, be shortened by improvement in communications and cheapening of transport and that "efficient communications exercise an immediate effect on the factor of time which is an essential element in the price factor." The emergence of some of India's commercial crops into prominence in the world market and their profitableness have become possible only through cheap transport facilities, and these are crops "not one of which could be grown on a commercial basis" otherwise. Bad communications, besides, increase the amount of absentee landlordism and tend to impair the health and stamina of draught animals, thus rendering them inefficient for the important work of cultivation. It is worthwhile recalling how the value of objects is enhanced by the opera-

1 Read the Author's "Economics of Protection in India."

2 Report, para 293.

tion of exchange in the eyes of the persons concerned in it. It enables both sides to derive greater satisfaction from the goods exchanged and the gain of one is not the loss of the other, as some are apt to suppose. Trade contributes to resulting mutual benefit by making exchange easier and its service is rendered more efficient in proportion as its cost is reduced. Rapid and cheap means of communication and transport enhance the efficiency of trade and therefore of exchange. When an isolated tract is opened by good roads or railways, the increased demand created for its economic products outside, enhances their value and the purchasing power of the producers. Hence the importance of good communications which, however, cost a great deal to make and keep in repair.[1] The expense is beyond the means of small village communities and would not be undertaken by individuals. The responsibility has, therefore, been naturally shared by the central and provincial governments and the local bodies.

The total length of metalled and unmetalled roads maintained at public expense in India is stated to be a little over two lakhs of miles, which is far from adequate to the needs of the population. A system of metalled roads covering the whole country and connected with a net-work of trunk, branch and feeder lines of railways, is an ideal to be aimed at and to be reached at as early a date as possible. The development of motor transport in recent years, has thrown a further burden on the roads, inadequate and unsatisfactory as they are. The motor lorry will displace the bullock cart only to an extremely limited extent, and the cultivator will have to rely mainly on the latter for purposes of the transport of produce in rural areas. Motor passenger services have multiplied in a wonderful manner, and though advantage is being taken of this facility by

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1 'Roads have been difficult to construct and keep in repair. For in the great Plains, which are built up of river-borne soil, there is no road metal at hand, and until the British had constructed railways, it was too difficult and costly to bring stone from a distance. So that the roads were merely beaten tracks across the fields, thick with dust in the dry season and impassable on account of mud in the wet. In the hill districts heavy gradients and torrential downpours defied the road builder. Even now there are only 54,000 miles of metalled road in the country, that is, less than one mile of good road for each thirty square mile of land."—*C. B. Thurston : Economic Geography of the British Empire.*

village folk, the importance of improving internal rural communications is as urgent as ever.[1] Difficulties in connection with the reform were chiefly financial and related also to the co-ordination of the authorities responsible for the roads. The Government of India, therefore, appointed the Indian Road Development Committee to investigate the problem. The Committee expressed the opinion that " a well-balanced scheme of additional taxation on motor transport for purposes of road development should include vehicle taxation as well as patrol duty, and should possibly extend at any rate in some areas, to license fees for vehicles plying for hire." Action has now been taken on these recommendations. This improvement has, of course, to be supplemented by transport facilities in the way of river and coastal navigation.

Railway construction was commenced in India in the fifties of the last century on the initiative of the State, and its object was strategic, political and administrative as well as economic. The far-reaching effects of the extension of railways on the social and the political life of India are a matter of common experience. Economically, the railways were intended to open the interior of the country to foreign imports and to provide an outlet for indigenous produce in overseas markets, and they have proved useful in the prevention and relief of famine and in the establishment of manufacturing industries in suitable localities. Lord Dalhousie, on whose recommendation the State preferred to entrust the construction of Indian railways to guaranteed British companies, held the view that 'the conduct of commercial undertaking did not fall within the proper functions of any government and least of all within the function of the Government of India, since the dependence of the population on the government was, in India, one of the greatest drawbacks to the advance of the country.' This doctrine of *laissez faire* had to be abandoned, and to-day the State in India not only owns the bulk of the railways but manages a large proportion of them itself. The total route mileage open now amounts nearly to 40,000 and the capital investment is about 700

1 The total number of motor vehicles registered in British India upto 31st March, 1928, was 1,44,864. Of these, one lakh were motor cars and taxi cabs; and heavy motor vehicles (lorries, buses &c.) numbered 19,008. The imports or these last in 1927-28 totalled 8,682 of the value of Rs. 1·4 crores as against 6,343 valued at Rs. 1·2 crores imported in 1926-27.

crores of rupees. Statistics showing the growth of railway mileage and traffic are given below :—

Year.	No. of Miles open for traffic	Passengers. No. (1,000).					Goods traffic: Quantity: tons (1,000)
		1st Class.	2nd Class.	Inter.	3rd Class.	Total	
1853	20	...	...	...	...	...	...
1873	5,697	...	...	...	...	...	...
1893	14,465	...	...	...	...	...	28,847
1898	21,993	611	2,253	5,673	131,512	151,566	35,642
1903	26,851	594	2,580	7,214	184,292	210,231	47,684
1908	30,576	748	3,327	10,660	284,579	321,169	62,398
1913–14	34,656	813	3,460	12,371	410,960	457,718	82,613
1917–18	36,334	883	4,216	7,719	381,017	430,269	85,472
1919–20	36,735	1,108	6,433	10,200	460,[illegible]06	520,027	87,620
1923-24	38,039	1,190	10,128	11,374	544,622	584,508	72,815
1924–25	38,270	1,101	9,778	12,[illegible]01	553,266	576,346	77,796
1927-28	39,712	980	9,963	17,351	594,821	623,115	82,070

134. Railways and Trade:—Each Province in India is commanded by one of the principal railway systems; and some of them are served by more than one trunk line. The very names of the Railways indicate the territories they cover, and for foreign trade, almost all the big railroads terminate in or rather start from one of the chief ports. The railways traverse the territories of the Indian States, some of which have their own lines also e. g. the Nizam and Mysore railways. The North Western Railway covers the Punjab and Sind and serves Baluchistan and the North West frontier, Karachi being its port. The East Indian Railway runs through Bengal, Bihar and the United Provinces and a part of the Central Provinces, and through the Calcutta port, provides an outlet and inlet for the rich Gangetic plain and the coal mines of Bihar and Orissa. The East Bengal Railway, which likewise terminates in Calcutta, serves North and East Bengal and Western portions of Assam. The Oudh and Rohilkhand Railway lies entirely in the United Provinces and runs parallel to the E. I. R. for a long distance. The Bengal Nagpur Railway taps the Central Provinces and connects the G. I. P. R. with Calcutta. It also serves the coal fields of Bihar and Bengal, Central India and Northern districts of Madras. The Bombay, Baroda and Central India Railway passes through Rajputana, Central India and Gujarat and terminates in Bombay. The Great Indian Peninsula Railway starts from Bombay and spreads itself out into

the Central Provinces and northern India as far as Nagpur and Jubulpur and Agra, Delhi and Cawnpore in the United Provinces. In the South it passes through the Deccan and traverses Hyderabad State up to Raichur. The Madras and Southern Maratha Railway covers the southern portion of the Bombay Presidency and runs through Mysore. Its broad guage section traverses the Madras Presidency and serves the port of Madras and Bezwada and Coconada. The South Indian Railway caters for the remaining parts of southern India and touches the coast in several harbours such as Madras, Pondichery, Negapatam and Tuticorin and connects Ceylon with India. Rangoon is the port for Burma railways.

The commodities handled by the railways consist mainly of the staple produce of tracts covered by them, which are collected along the lines and transported to the ports and of the imports of articles in common use such as piece goods, kerosine oil, hardware and sugar. The composition of goods traffic will be seen from the following statement showing, as an illustration, by commodities, the number of tons of freight originating on Class I Railways and the earnings from freight carried, in the year 1923-24:—

Commodity.	Tons originating on Home Line in Millions	Rs. in Crores	Commodity	Tons originating on Home Line in Millions	Rs. in Crores
(1) Coal and Coke ...	14·67	8·22	(12) Cotton, raw and manufactured ...	1·40	5·69
(2) Railway Stores ..	21·97	3·23	(13) Jute, raw ...	0·89	1·27
(3) Wheat ...	1·76	2·75	(14) Fodder ...	0·77	·60
(4) Rice ...	3·98	3·85	(15) Fruits and Vegetables ...	0·72	1·70
(5) Grains and Pulses...	3·54	5·48	(16) Iron and Steel, wrought ...	0·78	1·58
(6) Marble and Stone ...	2·16	0·78	(17) Kerosine Oil ...	0·76	1·67
(7) Metallic Ores ...	2·02	1·05	(18) Gur, Jagree &c....	0·83	1·35
(8) Salt ...	1·12	1·43	(19) Others ...	10·70	13·05
(9) Wood, unwrought ...	1·53	1·02			
(10) Sugar, refined and unrefined ...	0·56	1·22			
(11) Oil Seeds ...	2·29	3·36	Total ...	72·54	58·47

We shall now take a few specific instances of commodities and show how they are dealt with by the Railways. Take the rice crop first. Of about 80 million acres under that crop, over 25 per cent. are in Bengal, 20 per cent. in Bihar and Orissa, Burma and Madras having about 14 per cent. each. But Burma exports the largest quantity, being followed by Bengal, Madras and Bombay. Ceylon takes the highest percentage of our exports, Germany and Holland being in competition with that country. The Burma Railways have the highest tonnage and account for as much as 13 lakh tons and Rs. 68 lakhs freight earnings in 1920-21 as compared with about 6 lakh tons and 22 lakhs of rupees of the E. B. Railway. The M. and S. M. R. and the E. I. R. carried 6 lakhs tons and earned about 45 to 50 lakhs each. The small figures for the Bengal and Madras railways are explained by the fact that a considerable portion of the rice grown in the Provinces is retained for local consumption. The Punjab leads in wheat production and the United Provinces come next; and the largest quantity of wheat and wheat flour is, therefore, carried by the N. W. Railway which commands the most important areas in which that crop is grown. Of the 12 lakh tons, valued at about Rs. 13 crores, exported from India in 1913-14, nearly 9 lakhs were taken through the Karachi port and 2½ lakh tons through Bombay. About one-fourth of the total area and yield of cotton is accounted for by the Bombay Presidency, one-fifth by the Central Provinces and Berar, and one-sixth by Hyderabad State, Madras and the Punjab coming next in the order of importance. Bombay and Karachi, therefore, occupy a dominating position in exports which are collected and carried by the G. I. P. R., the B. B. and C. I. R., the N. W. R. and the M. and S. M. R., the share of the first being the largest. The traffic in jute, which is, for the most part, grown in east Bengal, is commanded by the East Bengal Railway. Owing to the easy means of both rail and river transport, now established in Assam, the production and export of tea have received great stimulus;[1] and the coal fields of

1 "The Darjeeling district was without a good cart road until 1869 and until the railway link between Siliguri and the Ganges was completed in 1878, a long journey had to be accomplished to the latter by country carts. But now Darjeeling tea has only to be brought from the estate to the nearest railway station where it can be railed direct to Calcutta, while the Assam Bengal Railway brings part of the produce of Assam direct to Chittagong and part is borne *on the broad waters of the Brahmaputra* into Calcutta by an excellent service of cargo steamers":—Hand book of Commercial Information for India, 1924.

Bihar and Orissa and Bengal have been penetrated and opened by a wide and complicated net-work of railway lines. No big industry is, now-a-days, possible, without its being connected by rail with the sources of raw materials and coal and with the ports and the internal markets.[1]

The principle governing railway rates for goods is, 'to charge what the traffic will bear.' As railways have to be managed primarily as business concerns, this is a reasonable basis, but the principle operates, in many cases, to the prejudice of indigenous industries and internal trade. For long leads and for wagon loads, the freight is lower and consequently the rates charged by railways favour and stimulate the carriage of raw materials to the ports and of foreign manufactures from them to the interior, while higher rates have to be paid on the movement of food, raw materials and the output of small, indigenous industries. As a matter of national policy, specially favourable rates are offered in certain countries in order to encourage indigenous industries. It appears to be necessary to pursue a similar policy in India, of course, consistently with the economical management of the railways. In this country of vast distances, industries, small and large, must be localized; and if they are to prosper, the cost of transport ought not to be a handicap. The competition of railways serving the same areas in central and northern parts of the country, has led to diversion of trade and wasteful expenditure, but mutual agreements and State control have minimised the disadvantage incidental to the rivalry of companies. The concessions granted to coal traffic on the railways and at the Calcutta docks illustrate the nature of the problem and its solution. Trade, both internal and external, has received great assistance from the means of communication supplied by the Post and Telegraph Department of Government. The rapid development of this service will be seen from the following statistics :—

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1 Consult the works of S. C. Ghose on this whole subject.

Year.	Miles of Mail lines, land and sea.	No. of Post Offices.	Value of Inland Money Orders.	Letters and Post cards &c	Parcels.	Paid Messages by Government Telegraph.	No. of Articles sent through V. P. P.
			Crores Rs.	Millions	Millions	Millions	Millions
1890-91	109,232	9,419	...	280·6	1·9	...	...
1900-01	131,600	10,970	...	469·2	2·6	...	...
1910-11	157,759	18,813	...	827·1	6 8	...	...
1913-14	155,806	18,946	51·18	923·0	12·6	16·5	...
1917-18	157,606	19,410	62·77	1002·4	14·1	19·1	10·0
1919-20	157,481	19,439	74·71	1189·4	15·8	19·3	11·3
1923-24	155,460	19,491	80·06	1052·5	13·5	19·0	10·9
1924-25	156,117	19,652	82·7	1095·9	14·4	19·8	11·5

135. Trade of the Ports :—The port towns of Bombay, Calcutta, Karachi, Rangoon and Madras dominate the internal as well as the external trade of the country, and the bulk of the traffic, representing about two-thirds to six-sevenths of the total trade, flows directly to and from them. Ports are among the most prominent cities in each country and this is pre-eminently the case in India. They are busy centres not only of trade but of industrial, banking and other economic activities. Their vast numbers, the business capacity of their people, their wealth and their higher standard of living contribute to their importance and make them hives of industrious workers and drones. The position which the Indian ports occupy with reference to the railways, the staple crops and trade has been shown above. The imports into them from abroad and from the interior are distributed over the territory commanded by them and exported to foreign countries, a part of the commodities being retained for local consumption. From one-third to one-fourth of the total inland trade is shared by the ports. The imports consisting of raw materials and the exports of manufactured goods, the former naturally are always in excess of the latter in quantity. More than three-fourths of the merchandise imported into the ports is made up of half a dozen staples such as raw jute and cotton, coal

and coke and grains and oil-seeds. Nearly one-half of the exports from ports into the interior, consist of cotton piece goods, sugar, wrought iron and steel, salt and rice. The total trade of eight principal ports, including foreign and coasting trade, in exports and imports but excluding government stores, is shown in the following statement :—

Trade of Principal Ports.

(In lakhs of Rs.)

	Pre-war average.	War average	1920–21	1924–25
Bombay ...	1,45,45	1,58,38	2,7841	2,57,21
Calcutta ...	1,59,78	1,62,50	2,59,84	2,64,10
Rangoon ...	48,96	51,55	89,66	89.90
Karachi ...	47,87	46,88	73,18	1,06,07
Madras ...	19,61	21,15	35,43	42,11
Cochin ...	6,28	5,60	9,14	10,46
Tuticorin ...	7,23	7,55	8,54	13,12
Chittagong ...	7,47	6,93	7,85	14,08

The need of improving Indian harbours, large and small, has been already adverted to. There appears to be too much concentration and congestion of trade in Bombay, Calcutta, Rangoon and Karachi, especially the first two; and natural disadvantages are pointed out as the chief obstacle in the path of the development of the other and the smaller ports. Bombay and Karachi are the only two natural harbours and enjoy distinct advantage over Calcutta, which, otherwise favourably situated, suffers from the handicap of the bars which constantly form themselves in the Hooghly. There are similar drawbacks in the position of the Burma ports. Madras Presidency has a large number of small but important ports such as Negapatam, Tuticorin, Calicut, Coconada, Vizagapatam, Masulipatam, Cochin and Mangalore. Their trade is carried on with adjoining countries between which and India there is active intercourse, such

as Ceylon, the Straits Settlements and Malay States. Bombay also has numerous ports which, however, carry on coastal trade for the most part and furnish outlets for timber, grain, grass and other local produce. The steady increase in the volume of traffic and the use of steamers of high carrying capacity call for the adoption of more efficient methods of loading and unloading goods and better provision of dock and warehousing accommodation and the employment of quicker means of handling trade generally. Extensive schemes of expansion and improvement have, therefore, been and are being carried out in the principal ports of the country. Some of the smaller ports are likewise being developed and raised to the status of first class ports, e. g. Vizagapatam, now declared to be a Major Port and commanding the traffic of large parts of Orissa, C. P. and Hyderabad; and Baroda and Mysore are opening their territories in a similar manner. Bombay, for instance, has now three fully equipped wet docks, having a total water area of 104½ acres and a total quayage of nearly 4½ miles and also two dry docks. Over two hundred hydraulic cranes are in use in the wet docks. Direct communication has been established between the docks and the railways and the goods depots; and the new cotton depot at Sewri is stated to be the largest and the best equipped of its kind in the world. The first electric trains to run in India were those of the harbour branch of the G. I. P. Railway. The schemes of development in connection with the Bombay harbour have been enormous, and costly improvements have been carried out in Calcutta, the new system of King George's Dock having added to the existing extensive provision for the handling of import and export trade. Karachi is a growing port, and as its foreign trade is increasing, the need of larger accommodation, more facilities and better equipment, is being keenly felt.

136. Trade of the Interior :—Though the population of the country is mainly rural and its foreign trade is centred in the ports, there are in the interior, as may be expected, a number of commercial and industrial towns which serve as collecting and distributing centres. Owing to its huge dimensions and concentration in a few ports as also owing to the large profits it yields to shippers, bankers, middlemen and speculators, the growth of foreign trade has become one of the most striking features of the economic condition of the country, and it is a national aspiration to draw into Indian hands

the control and into Indian pockets the gains accruing from it, in an increasing proportion. With it is intimately connected the internal trade of the country and the development of indigenous industries. Each Province has its commercial towns, conveniently situated for exchange of goods, and varying degrees of enterprise are exhibited by the trading community there. Thus Cawnpore is an important railway junction, situated at about 870 miles from Bombay and 630 miles from Calcutta. It is, therefore, a convenient centre for the distribution of foreign goods; and its factories also produce a variety of commodities such as sugar, leather goods, cotton textiles and woollens. Lahore and Amritsar are the chief trading centres for agricultural produce and manufactures in the Punjab. Delhi is not only an industrial city but a point of attraction for indigenous and foreign goods for distribution. Capitals of Provinces and of the Indian States are all collecting and distributing centres, and a similar function is performed, on a smaller scale, by all district and taluka towns. It must be borne in mind here that these cities and towns have large populations whose demand for consumption goods is extensive, and their industries too absorb a goodly portion of the imports. The consuming capacity of the city and island of Bombay, is as large as that of several districts of the Presidency put together. In cities having an appreciable number of Europeans or Indians with modern tastes and habits, foreign manufactures are in considerable demand and there are a number of European shops. The prices charged in these latter are, however, higher than those of Indian-owned shops whose establishment costs are lower.

Evidence was given before the Indian Railway Committee by several witnesses to the effect that the existing railway facilities were hopelessly inadequate to meet the rapidly growing demand of trade. It was found as a result of the inquiry that wagons, locomotives, sidings, yards, godowns, bridges, in short, the whole of the equipment of the various railways in this country, required urgent improvement and expansion. Congestion of traffic, both goods and passenger, is indeed the every day experience of all those who have any thing to do with the railways which are fast becoming increasingly popular among the mass of the people who are found to evince an ardent desire to secure more rapid means of transport for passengers and goods in tracts in which they are particularly interested. According to the decision arrived at in 1922, to devote from capital Rs. 150

crores in the course of five years to the improvements recommended, funds on a large scale were annually supplied for purposes of rehabilitation, betterment and extension. The Railway Committee's report has published official evidence to show how agricultural producers have benefited by the high profits earned by them through the facility of transport of their goods afforded by the railways passing by their villages. There is no doubt that improved communications like railways and metalled roads are now everywhere appreciated and are in universal demand and that they have enhanced the "efficiency" of the agricultural produce of numerous villages to the great benefit of the producers. Motor transport has also caught on in rural areas, and business trips to different places are becoming less expensive and more common. In fact, this form of transport is now seriously competing with Railways in certain parts of the country, and its educative effect, if not also the directly economic, is considerable.

To sum up: What sections and proportion of the agricultural population have profited by the change, what is the degree of that benefit and if there is any set-off against the advantage, are, of course, points that require careful consideration. It has been already stated that exports and imports stimulated by the improved means of transport, have introduced a silent but unmistakable economic revolution. Modes and objects of consumption have changed; the cultivation of certain commercial crops has extended at the cost of food grains and fodder; old indigenous industries have grown out of date; gins, presses, oil mills and rice husking and ground-nut shelling machines have been set up in rural areas; large-scale industries have risen in crowded towns; centres of trade and industries are being shifted; the cultivator is receiving higher prices for his produce; the old rural isolation is gone; western systems of production and exchange are being fast adopted; the familiar avenues of employment are being slowly and painfully replaced by new ones; internal migration is on the increase; prices are influenced by external forces and are equalized all over the country; there is easier and more even distribution of goods, and the hardships and distress of famines have been minimised; the idea of growing for a distant market and conveying the produce to its destination by rail and steamer is gaining ground in the popular mind; and the channels of trade are being shaped and governed by these considerations. The old order is changing, yielding place to new.

137. Internal and Coasting Trade:—The internal trade with one another of the Provinces and the Indian States, shows how the different parts of the country supply to one another their special products and benefit by the exchange.[1] Food grains, raw cotton and piece goods, sugar, salt, coal and gold and silver bullion and coin are some of the principal articles thus exchanged. On account of its long coast line and its internal distances, the trade of India is, in some respects, not unlike that of the United States of America, with its Atlantic and Pacific coasts unequally accessible to commerce. The exchange between Burma and other parts of India is of a peculiar character. Rangoon dominates the inter-provincial as well as the foreign trade of Burma, about 90 per cent. of the latter passing through that port. Nearly 80 per cent. of the coasting trade with other Provinces and 40 per cent. of the inter-portal trade goes through Rangoon. Low ocean freights place foreign manufactures in a favourable position in competition with Indian goods. Except for this feature, which has also been referred to in a preceding section, inter-provincial trade is now brisk and extensive. Bengal coal feeds the boilers of the mills in Bombay and Ahmedabad, and the dhoties of these cities have a considerable demand in Calcutta. Cotton and Woollen cloth, sugar and leather goods manufactured in Cawnpore find a ready market in the southern parts of the country and the products of the latter e. g. fine cotton cloth, have a considerable sale in northern India. Wheat from the Punjab and the United Provinces is carried into the Central Provinces, Berar, Hyderabad and northern districts of Bombay and cereals are imported into the western Presidency from Madras. Brass vessels from south Deccan have a market in Khandesh, Berar and the Nizam's territory. As U. S. A. and Great Britiain both manufacture motor cars and yet there is exchange between the two countries in that commodity, so Provinces producing a crop like rice are found to trade with one another in that staple. Cawnpur and Delhi rice is in demand in Bombay.

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1 "Railways have now linked up different parts of the country and have constituted India into, as it were, one market. The deficiency in one part of India now makes itself felt all over the country within a very short space of time and is made good at once, the rise in the price-level being comparatively small. Every village and every district which is connected by rail are no longer self-supporting units. The powerful and ubiquitous agency of organised commerce has taken the place of the former system, the isolated and self-sufficing village."—K. L. Datta: Report on High Prices.

Coasting trade carried on by the maritime provinces and States calls for no special remarks. Certain localities, not directly connected by railways, are more easily accessible through the ports, large and small, which are to be found all along the coast of the country, and the trade with Burma has to be predominantly of this nature. Sea freight likewise is often found comparatively lower than railway freight between certain points. The trade of the Kathiawar ports has, again, recently raised an issue of first rate political and fiscal importance. The economic and fiscal relations between British India and Indian States is one of the biggest problems that must be satisfactorily solved in connection with the constitutional reforms now under discussion. Economically, culturally and socially, though not politically to-day, the two Indias are one, and they can not be kept apart without detriment to either. The total value of coastal trade in 1921–22 was Rs. 222 crores as against Rs. 166 crores in 1918–19 and 134 crores in 1913–14, the corresponding figure for 1924–25 being Rs. 211 crores. Later statistics are not given in the latest Review of the Trade of India which, however, records that Burma imported from India 16·5 crores worth of goods in 1927–28 as compared to 8·3 crores, the pre-war average and the corresponding figures for exports from Burma to India were Rs. 31·2 crores and 11·7 crores respectively.* Coasting trade, as will be seen from these figures, is not inconsiderable and has assumed particular importance on account of the claim of indigenous shipping companies to State aid in relation to it. The land frontier trade is much smaller and was valued at Rs. 21½ crores in the last pre-war year and at Rs. 33 crores in 1921–22 and about 40 crores in 1924–25. The frontier extends over 6,800 miles and yet the trade across it is only 5 per cent. of the total sea-borne trade of the country. Persia, Afghanistan, Dir, Swat and Bajaur, Central Asia, Nepal, Tibet, Sikkim, Bhutan, Western China, Shan States and Siam participate in this trade. The imports from these regions consist mainly of raw materials such as wool, timber, hides &c., and the exports to them of such commodities as piece goods, metal manufactures &c. The size and the nature of this trade reflect the economic condition of the countries lying near and beyond our frontiers.

138. **Shipping** :—In spite of eight hundred crores worth of an annual foreign and coasting trade, India has practically no mercantile marine of her own. Every maritime country sets a high

value upon the ship-building industry and on its shipping activity; and the incalculable importance of these was brought home to the mind of the world during the great war when the fate of nations hung upon the capacity to control maritime trade routes and to transport food, munitions and soldiers over long distances through water. The purely economic value of secure and cheap means of maritime conveyance is undoubted, and the activity concerned in providing them, is productive of wealth to a community. At one time Indian shipping and the ship-building carried on in Indian ports were co-extensive with the economic development of the country which had not to look to other nations for maritime services.[1] But the old wooden vessels and sailing ships have been displaced by foreign steamers most of which are of very high running and carrying capacity. The total extinction of Indian shipping and the entire dependence of this country for transport of its exports and imports upon the mercantile marine of other countries, is an effect of the rapid economic advance of foreign nations and of India's inability to use machinery and power and to adopt improved methods of organization. The total freight on the growing foreign trade of the country means a loss of no less than Rs. 50 crores a year, to which must be added the heavy loss to the people on account of the disappearnce and absence of a valuable industry. The skill, the daring and the enterprise which are called into play in the shipping business are advantages of great national importance which the country does not enjoy. Petty boatmen, fishermen and lascars are the only people now engaged in the occupation, and even their position is precarious and unsatisfactory. Wooden country boats continue to be built and the activity was temporarily stimulated during war time; steam launches are also constructed

1. "Thus has passed away one of the great national industries of India after a long and brilliant history, covering, as we have seen, a period of more than twenty centuries. It was undoubtedly one of the triumphs of Indian civilisation and the chief means by which that civilization asserted itself and influenced other alien civilizations. India now is without this most important organ of national life. There can hardly be conceived a more serious obstacle in the path of her industrial development than this almost complete extinction of her shipping and ship-building."—Radhakumud Mookerji: History of Indian Navigation and Maritime Activity.

for use in Calcutta, Burma and Bombay, by European engineering firms. But modern ship-building is conspicuous by its absence. An idea of the shipping engaged in the Indian trade may be obtained from the following statistics :—

Number and Tonnage of Vessels entering and clearing in Indian Ports.

Year	No. of vessels.	Tons (1000)
Pre-war Average	8,567	16,216
War-Average	9,589	11,674
Post-War Average	7,981	15,247
1925–26	7,623	17,136
1927–28	7,834	17,570

The shares of the various nationalities in the tonnage of vessels which entered into Indian ports in 1927–28, will be seen from the following percentages :—

Nationality		Percentage Share
British	...	69·7
British Indian	...	1·4
Foreign:		
Japanese	...	6·1
Dutch	...	3·4
Norwegian	...	1·5
Italian	...	5·2
Chinese	...	...
Greek	...	·4
Swedish	...	·6
French	...	1·9
Spanish	...	...
Russian	...	...
American	...	2·8
German	...	6·0
Austro-Hungarian	...	...
Other	...	·3
Native Craft	...	·7

Since the opening of the Suez Canal, foreign trade has been carried mostly in steamers at the expense of sailing vessels. "A few sailing vessels still visit Calcutta, but the sailing ships entering other ports are now almost entirely those classed as native craft, which, though numerous, contributed in 1913–14 less than one per

cent. of the tonnage, and were engaged in trade chiefly with East Africa, Persia and Southern Asia. They are slowly but surely disappearing."[1] The vessels which enter and clear the ports of India for the most part fly the British flag, the tonnage of vessels sailing under that flag representing a little less than three-fourths of the whole, and the tonnage of vessels under that British Indian registry being practially negligible. The analysis of the tonnage of vessels engaged in foreign trade given above shows that about 70 per cent. of the total is British, about 1·5 per cent. is British Indian and the balance is distributed, in small shares, among a number of foreign nations.[2] The total tonnage of the coasting trade is about 20 to 30 million, 75 per cent. of which is accounted for by British vessels, 15 per cent. by British Indian, 9 per cent. by foreign and 2 per cent. by Japanese vessels. The tonnage of native craft amounts to 3 million as against 25 million of steamers. About 20 thousand vessels, excluding native craft, which number 1,50,000, are engaged in the entries and clearances of this trade.

139. Shipping and State Aid:—Vessels belonging to foreign countries have been trying to obtain an increasing share of the carrying trade, and the governments of those countries adopt special measures such as subsidies for encouraging navigation, ship-building and the extension of steam-ship routes. The following table will give an idea of the dimensions of the total commercial shipping tonnage of the world and the shares of the leading nations in it:—

World's Shipping.

(IN MILLION TONS)

Countries	1914	1927	Difference (in %)
England	18·8	19·8	+ 1·3
Germany	5·2	3·3	− 35·3
U. S. A.	2·0	11·1	+451·1
France	1·9	3·6	+ 74·0
Japan	1·7	4·0	+136·0
Italy	1·4	3·3	+137·0

1. Review of the Trade of India, 1913–14.

2 While, of course, enemy ships disappeared from Indian ports during the war, there was a larger number of Swedish, Norwegian, Dutch and Japanese vessels entered and cleared in the foreign trade. Japanese vessels increased from 130, the pre war average, to 283 in 1915–16 and to 477 in 1916–17.

The above figures show what changes have occurred in the position of world shipping since the War. Leading nations of the world have been actively protecting not only the ship-building but the shipping industry also. Even the British government has afforded, under the Trade Facilities Act of 1921, considerable financial assistance to national shipping. France, Spain, Italy and other nations have pursued a similar policy.[1] The total amount of subsidies of all kinds paid by the Japanese government to its steam-ship companies has amounted at times to more than Rs. 2 crores; in the budget for 1926, nearly 7 million yen were provided for this purpose. With the help of the State, Japanese industries and trade have been making rapid progress, and shipping and ship-building have not been neglected by that progressive nation. The activities of the Japanese mercantile marine are no longer confined to Asiatic waters, and Japanese steamship companies have established direct business with European and American ports. Japanese firms have also entered import and export business in India in right earnest, and they are throwing their tentacles far and wide, starting their factories on the Indian soil with a view to more effective competition.

It may be argued that a large mercantile marine is not indispensable to the greatness or even to the prosperity of a nation, and the theory of international division of labour and of the specialization of economic functions may be invoked in support of the contention. We may also be told that India can rely upon England which possesses the most splendid shipping and ship-building industry in the world, to satisfy her demand and that it would be wasteful to create a mercantile marine in this country. From the point of view of trade, cheapness of freight is the primary and deciding consideration but the larger national interests, in apparent conflict with it, can not be ignored. Thus Gide,[2] in describing the strenuous efforts of the French Government to promote the growth of French shipping, has anticipated the Free Trade argument 'that it may be much more advantageous for a country to have its goods

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1 Article by Dr. Rudolf Krohne in "Strukturwandlungen der Deutschen Volkswirtschaft," Vol. II.

2 "Maritime transport is a lucrative industry and a country which like *Holland in former times and England to-day, transports the goods of all other* countries, will find profit in doing so while the country which has to apply to other countries to transport its own products must evidently pay the price of it."—Gide : Political Economy.

transported cheaply by other countries better equipped for the purpose than to do it itself,' and asked in reply 'whether it would not be good for a country as favourably situated as the others to do it itself.' According to that author's own showing, the state subsidies paid in France have apparently proved futile as that nation does not seem to have received in return even a portion of the value expended in assisting ship-owners and shipbuilders. The recent experiments of U. S. A. and Australia have not fared much better, and these nations have still to pay Great Britain for the shipping services utilized. Such examples of wasteful state effort do not, however, provide an argument against the aspiration of the people of this country to provide themselves with a modest mercantile marine which will prevent powerful foreign combines from having Indian trade at their mercy. With a growing foreign trade, India does not count in shipping and ship-building when compared to other countries, and these are calculated to be important avenues of wealth-creation for her people. If India is able to transport her imports and exports in her own steamers, she will save Rs. 50 crores a year in freights[1] and will give employment to thousands of workmen of all kinds and grades. It is humiliating and anomalous that India should be entirely dependent on other countries even in coasting trade when the traditions of the people ensure the success of indigenous shipping and the requirements of economic progress demand development in that direction. India has in abundance the material out of which sturdy and enterprising sailors are made. They ply their boats along the coasts and take them to the Persian Gulf and harbours of other neighbouring countries. But even the brave Indian lascars are barely tolerated on British steamers and thus are opportunities to promote legitimate improvement denied to Indian people.

Indigenous shipping and ship-building have met the same fate as the other old occupations and industries of the country—they have gone under in the intense competition with them of highly efficient machinery and organised foreign enterprise. A proposal

1 The freight per ton to London for Indian rice and wheat, which was about 11 s. in 1896, 15 s. in 1906 and £ 1 4s. in 1914, rose to £ 4 in 1915 and to £ 8 8 s. in 1916. It fell to £ 7 towards the close of 1919 and was further reduced to £ 3 15 s. in April, 1920. The freight declined steadily to the neighbourhood of £ 1 5s in 1924-25 and has now nearly reached the pre-war level.

in favour of their revival and establishment on a modern footing is met with the same objection as is encountered by the advocacy of the creation of fresh fields for industrial activity as well as of the resucitation of the other decaying and dead industries of the country. The resources necessary for the development of a modern ship-building industry such as large steel and machinery works, are wanting in India, and the enterprise and organisation required for success in the shipping business is absent. To be successful, ship-building must be conducted on a large scale, and there is no scope in this country for such an enterprise. India has to rely, therefore, like other backward countries, on the ship-building yards of Great Britain for its requirements of ships. As regards shipping, the history of the few navigation companies which have been started in India within recent years, illustrates the difficulties which have to be faced from all sides. When all is said and done, however, the facts stand that other nations, not better circumstanced, to start with, than India, have built up the above industries with success and that every maritime country, small and large, is trying to promote its shipping. And with a long sea board, extensive foreign and coasting trade and with a numerous population accustomed to seafaring and with awakened national aspiration, it ought not to be impossible for India to have a decent mercantile marine of her own to the great economic advantage of the nation.

140. Indian Mercantile Marine:—The considerations set forth above, could not fail to carry weight with the reformed Indian Legislature which took an early opportunity to impress on the government the urgent necessity for the State to do its part in the inauguration and maintenance of an Indian mercantile marine. The position may be summed up thus:—"In the first place, there was a well-grounded belief among reflecting persons that India, with her long sea-board, can not afford to neglect her development upon the ocean. In the next place, since 1914, there have been several years when there was a serious shortage of shipping, from which India's trade suffered considerably. Thirdly, Indian enterprise has for long suffered from lack of any encouragement or protection; with the result that few Indian shipping companies have been able to survive the keen competition and severe rate-cutting which so-called "foreign" combines have occasionally introduced into Indian waters."[1] The

1 India in 1923-24.

whole question was, therefore, investigated by the Headlam Committee which was asked by government to consider, among other things, what measures could be usefully taken "for the encouragement of ship-building and of the growth of an Indian mercantile marine by a system of bounties, subsidies and such other measures as have been adopted in Japan."

The comprehensive nature of the measures required can be judged from the fact that the recommendations of the Committee were grouped under three heads: (1) provision for training Indian executive officers and engineers for the mercantile marine; (2) measures for encouraging self-propelled shipbuilding; and (3) development of an Indian mercantile marine. Shipowners are naturally interested in being able to purchase vessels cheap and if they bought their requirements abroad, with an eye to minimum cost, shipbuilding would have no chance in India, and as it was desirable to encourage the building of ships in Indian dock yards any State assistance granted to shippers, had to be extended also to that industry. The Committee proposed that the object should be achieved by the grant of bounties on the construction of ships and also assistance in other and indirect ways. As regards a mercantile marine, it recommended the eventual reservation of the Indian coasting trade for ships the ownership and controlling interests in which are predominantly Indian and the issue of licenses to trade on the Indian coast on conditions calculated to ensure the attainment of the aim of equipping India with a mercantile marine at an early date. By means of the system of deferred rebates and of unremuneratively low rates of freight, the foreign shipping companies can nip in the bud any Indian enterprise that ventures to compete with the established monopolists, and many an indigenous navigation concern has been wrecked on the rock of such ruthless rivalry. The assistance sought for the Indian mercantile marine is intended to protect it against this kind of killing competition of powerful interests and to bring about the transfer of the ownership, management and control of ships plying along Indian coasts, ultimately to Indian hands. These measures may appear to be drastic and uneconomic, but if the country is to have a mercantile marine, controlled and managed by Indians, in the larger interest of the people, the necessary price has to be paid. Effective remedies can be applied by State initiative and action alone.

The Coastal Traffic Reservation Bill, known as Haji's Bill, which was mainly based on considerations set forth above and introduced in the Legislative Assembly raised a storm of opposition on the side of European vested interests. It required that Indian coastal shipping should be legally restricted to companies with Indian capital and under Indian management. To-day, the monopoly of this trade which is in the hands of two European companies, is threatened by the proposed legislation. It is consequently represented by hostile critics as an act of confiscation and expropriation. On the other hand, it is claimed that it is neither the one nor the other but is a legitimate measure and that in no other way is it possible for the Indian nation to secure a mercantile marine of its own, at least in the coastal trade. And the issue is boiled down to the question "whether the fiscal and economic policy of India should be determined in the interests of British capitalists in India," or in those of the Indian nation.

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CHAPTER X.

TRADE, TARIFFS AND INDUSTRIES.

141. Freedom of Trade :—We have attempted to bring out the intimate relation which subsists between the internal and external trade of a nation and the condition and the development of its industries. The question that will now engage our attention will be if and how this relation may be beneficially regulated. The account given in the last chapter of the economic revolution which the expansion of internal and external exchange has brought about in India and which has reduced the people to the state of producers of raw materials and consumers of foreign manufactured imports, likewise leads naturally to a discussion of the question whether it is desirable, after all, that trade should be left to take its own course or it should be so regulated as to make it conduce to the development of indigenous industries, and in any case, to prevent it from affecting prejudicially the economic interests of the country taken as a whole. As we have shown in the last chapter, the theory of international trade extends the idea of the simple and mutually beneficial exchange between individuals, to the commerce between communities and countries, and on that theory, nothing can be more detrimental to progress than any restriction imposed upon free intercourse between nations. International trade on a small scale was conducted by people long before local and national trade were expanded; and merchants carried on profitable exchange of necessaries and luxuries between distant parts of the world. But it was the growth of internal trade and of national industries that stimulated foreign trade, and the external commerce had likewise an important effect on the extent and organization of local and national trade and industry. National consciousness and political rivalries, however, necessitated regulation, restriction and stimulation, and these resulted even in wars for trade monopolies. This is not, however, a question merely of political expediency but of scientific validity and of a correct understanding of the proper scope of Economics.

The State may interfere with the unhampered operation of trade for one or more of the following four reasons: (1) to secure revenue for the public treasury; (2) to restrict or prohibit the consumption of certain deleterious goods; (3) to control relations between individuals in a way that will conduce to the welfare of the whole community; and (4) to protect national industries against foreign competition. When people are taxed through customs duties levied on commodities imported from abroad, the primary obejct is to obtain maximum revenue and care is, therefore, taken to maintain the volume of trade undiminished, but in cases where the purpose to be attained is the protection of national industries against external competition, high duties are imposed so as to restrict and even to prohibit the imports of foreign goods. The rates at which goods are taxed on importation, or at export, are called 'tariffs,' and the schedules or lists containing the names and descriptions of articles now-a-days include hundreds of items with minute specifications. A protective tariff is deliberately restrictive while a revenue tariff ensures freedom of trade. A large majority of the nations of the world to-day, pursue a system of protective or restrictive tariffs. Not that they do not appreciate the value of unhampered exchange between nations, because they are ever striving to open new markets and fresh sources of raw materials; but they believe that the unchecked competition of other nations in their domestic markets is harmful to indigenous industries and therefore they raise high tariff walls in order to keep out foreign commodities. In the policy of States regarding international trade, the advance has been from ignorant restriction to enlightened and scientific regulation.

The basic theory of international trade, viz. that of comparative costs or advantage, took a long time to shape itself and win general appreciation. Commerce with strangers was, for centuries, looked upon as a bargain in which one of the two parties derives benefit, and foreign trade was nothing but the exploitation of foreign countries for the advantage of one's own nation. The Physiocrats believed that foreign trade, like domestic, produced no real wealth and that if one of the parties to the bargain gained, it was at the expense of the other. They, however, condemned the restriction of foreign trade on the ground that liberty and free competition alone made plenty possible. The ideas of freedom of action and competi-

tion were, at their time, slowly gaining strength. The old guild system was crumbling and there was a general protest against the restriction of liberty, in economic as well as in political and social affairs. The war of American Independence and the French Revolution shook the social fabric seriously and every where impatience of control and regulation began to be betrayed.

142. State Regulation :—The Physiocratic doctrine represented the reaction which took place in France against Mercantilism that had held the field in Europe for nearly three hundred years. Adam Smith, following and improving upon the Physiocrats, led the movement in favour of freedom in England, and the policy of commercial restriction became discredited there till at length in 1845 the last shackles on international exchange were thrown off and the flag of free trade was planted on the citadel of British mercantilism. It was at one time the fashion to pass wholesale condemnation upon the thought and policy of Mercantilists but they have latterly been better appreciated. Mercantilist tendencies which prevailed in Europe in the sixteenth, seventeenth and eighteenth centuries, are thus summarised :—" (1) Towards over-estimating the importance of possessing a large amount of the precious metals; (2) towards an undue exaltation (*a*) of foreign trade over domestic, and (*b*) of the industry which works up materials over that which provides them ; (3) towards attaching too high a value to a dense population as an element of national strength ; and (4) towards invoking the action of the state in furthering artificially the attainment of the several ends thus proposed as desirable. " [1]

In spite of the obvious errors and exaggerations of Mercantilism, the circumstances of the time, it is now conceded, necessitated its adoption and even rendered it beneficial. The growth of communities, profoundly conscious of their independent nationality, the discovery of the new world, the Spanish monopoly of the mines of the precious metals there, the struggle for the control of trade with the East and the religious discord which raged over Europe, easily account for prevalent policy of commercial and industrial restriction. Some of the chief features of the protectionism of to-day are clearly survivals of the ideas underlying the mercantilist system, and traces of Col-

bertism, for instance, may be seen in the tariff policies of modern States, though they are, no doubt, intended as correctives to the intensely individualistic and competitive tendencies of modern times. Even Adam Smith justified certain exceptions to his general doctrine of liberty and approved of the English Navigation Act on the ground of defence being more important to a nation than opulence. The theory of commercial freedom was perfected by Adam Smith's followers, and in the hands of Ricardo and Mill, it assumed a rigidity which, in its turn, provoked a reaction. By the middle of the nineteenth century, the Free Trade theory of the Classical School had *won a complete triumph in* Europe.[1]

But the sense of triumph felt by the advocates of free trade was rudely disturbed by the appearance of List's *System of National Political Economy*. The political and economic conditions of Germany favoured the success of his book and of the new doctrines it preached, and the publication of List's work was as great a landmark in the development of economic thought as the appearance of the Wealth of Nations had been two generations before. List's work was characterised by originality, and he was a pioneer in the field of developing National Political Economy. He introduced two ideas that were new to current theory, namely, (1) the idea of nationality as contrasted with that of cosmopolitanism, and (2) the idea of productive power as contrasted with that of exchange values. High hopes had been entertained about the spread and acceptance of the free trade doctrine and it was believed that a new era of universal peace and amity had dawned. The favourable attitude of European nations including France and Germany, in the sixties of the last century, gave special encouragement to these hopes. But this dream was shattered by the awakening of national consciousness in countries which were economically backward and by the growing desire among them for many-sided national development. List maintained that regulation of trade and industry was necessary for the systematic development of a nation's resources and of its latent

1 "Freedom of international trade was accepted as a sacred doctrine by the economists of every country. In Germany, as in England, in France as in Russia, there was complete unanimity among scientific authorities. The socialists at first neglected this topic, and when they did mention it, it was to express their complete approval of the orthodox view."—Gide and Rist: A History of Economic Doctrines.

productive capacity, which may be hampered by foreign competition.[1] "The American economist Carey directed his attack, like List, against the industrial pre-eminence of England and substituted for the ideal of international division of labour the ideal of independent nationality, each nation devoting itself to all branches of economic activity and thus evolving its own individuality."

The wave of reaction which was thus ushered in, spread all over the world, and there is not a single country in the world to-day, excepting England, which has not avowedly discarded the absolute doctrines of the classical school of Political Economy. Views of economists are naturally coloured by the special conditions of their own countries with which they are intimately familiar. English economists favoured free trade because it suited the requirements of Great Britian best, and American and continental thinkers preferred protective tariffs for a similar reason. And even in England the movement against the State's attitude of indifference towards commercial and industrial organization, has gathered force, and the experiences of the greatest war known to history, have necessitated a revision of national economic ideas and policy. The lofty ideals underlying the League of Nations, about international amity and co-operation and the resolutions of the Economic Conference of May, 1927, have not been translated into realities so far as protective tariffs are concerned, in the prominent countries of the world such as U. S. A., France and England.

143. Colonial Policy:—European nations, in the grip of a profound faith in Protection, endeavoured to stimulate manufactured exports and to discourage imports from foreign countries, except raw materials and the precious metals. They exercised a rigid control over the trade of their colonies in the West and the East and manipulated it in such a way as to benefit the mother country at the

1 List says in one of his writings:—" We consider all the branches of national economy together as organized limbs of one body; we consider the whole as well as the individual parts, such as industry, agriculture, trade, shipping as constituent parts of the nation, which are the very essence of the nation, even as much as its political administration and the system of military defence; in the regulation of these elements as of the others, the whole past, present and future of our nationality and our relations towards other and great national communities are to be considered."—Artur Sommer: " Friedrich Lists System der Politischen Okonomie "

expense of their economic development. Spain monopolised the trade with her colonies in the new world and tried to prohibit other countries from participating in it. The wars of England with Spain, Holland and France during the seventeenth and eighteenth centuries were colonial and commercial wars, and the jealousies which have marred the friendly relations of European powers with one another during recent years, have been also commercial. England lost her American colonies on account of obstinate insistence on the exercise of sovereign authority in internal as well as external economic affairs. So ingrained was the belief in the old country's natural rights to control the trade and shipping of its colonies that the British emigrants in America did not even dream of disputing it.

The settlements, protectorates and spheres of influence of European powers in Asia, Africa and America, which are inhabited by backward races, are fields of economic exploitation, and attempts are made to keep them as preserves for the trade and industries of the dominant or the mother country. Economic and political Imperialism has thus become the normal policy of the leading nations of the world, and economic control over weaker peoples has always been sought by them. Rival powers often arrive at agreements to share the benefits of economic exploitation on certain terms. But colonies where white populations have settled, can no longer be treated as plantations used to be in olden times, and the American War of Independence taught a lesson which has been taken to heart. These new nations, with undeveloped resources, have the same economic aspirations as the older ones and they evince a desire to stimulate manufactures within their own borders. The tendency now, therefore, is to draw together countries inhabited by people of the same race and bind them by ties of preferential tariffs. Large aggregates thus form customs unions, and they trade freely among themselves, only penalising the trade of foreign countries.

While tariff wars are, therefore, waged with foreign and rival countries, concessions are given by friendly and allied nations to one another. Competing countries come to terms with each other, and "the most favoured nations' treatment" is a recognized means for creating amicable trade relations. The tariff reform movement in England has two aspects : it is intended to protect British industries against the encroachment of foreign nations; and the Dominions are to be linked closely to the mother country by a scheme of preferen-

tial trade within the Empire. British Dominions have, of their own accord, been discriminating in favour of goods imported from the United Kingdom. Mr. Joseph Chamberlain initiated the movement soon after the Boer war, and though, owing to the continued prosperity of England, in spite of or as a result of her free trade policy, it was discredited for a time, the world war added tremendous weight to the demand for Protection and Imperial consolidation.[1] Such were the apprehensions entertained regarding the disastrous consequences of the war, that even before it had closed, this problem was investigated by the Balfour Committee appointed by the Asquith coalition government in 1916, "to consider the commercial and industrial policy to be adopted after the war, with special reference to the conclusions reached at the Economic Conference of the Allies."

The Committee recommended, in view of the experience gained during the War, that special steps ought to be taken to stimulate the production of food stuffs, raw materials and manufactures within the Empire wherever the expansion of production was possible and economically desirable for the safety and welfare of the Empire :—'Therefore the Imperial Government should now declare its adherence to the principle of preferences for products and manufactures of the Dominions in respect of any customs duties now or here-after imposed upon imports into the United Kingdom.' The committee further considered it necessary soon to consider as one of the methods of achieving the above objects the desirability of establishing a wider range of customs which would be remitted or reduced on products and manufactures of the Empire and which would form the basis of commercial treaties with Allies and neutrals. The reception accorded to the report in England brought out the usual sharp divergence of view which still exists on the question.

144. Commercial Treaties :—After the close of the War, laws like the Safe-guarding of Industries Act were passed and measures were taken by the State in England to give direct and indirect assistance to national trade and industries. But a radical change in fiscal policy did not find favour with the nation, as a general election fought on the issue of Protection demonstrated. Mr. Baldwin's government, even with an overwhelming conserva-

1 Read the Author's "Indian Industrial and Economic Problems", Chapters I and II.

tive majority at its back, could only attack the problem by a flank movement and proposed to assist industries in specified exceptional circumstances and with adequate safe-guards. The feeling, however, that some measure of protection, in one form or another, is essential to certain industries is growing stronger in England. Even without formally giving up free trade, the British government has extended assistance to national industries in an indirect manner, and to that extent, British attitude relating to individual freedom and unrestricted competition, has been modified. Favourable treatment to a country's exports can be and is secured by means of treaties with foreign nations. But having no comprehensive high tariff, Great Britain has little to give in exchange for concessions from others. As against its single tariff, protectionist nations have either the 'general' conventional tariff or 'the maximum and minimum', tariff which enables negotiations being conducted with a view to obtaining fair treatment. Reciprocity and 'fair trade' are established as a result of commercial treaties, and international jealousies, attacks and reprisals are thus avoided. Commercial agreements have, therefore, become very common in recent years.

The case for British tariff reform, in fact for the tariff policy of every nation, stands or falls with the actual application rather than the general acceptance of the theory of the reciprocal advantage of the freedom of trade. It would be absurd to increase facilities for exchange and then to obstruct it by means of tariff walls. Nations, however, find that the unregulated imports of certain goods tend to restrict the market for home manufactures and are driven to measures of a restrictive character or of artificial stimulus to indigenous industries. International understandings and treaties are, therefore, an important advance over crude attempts to penalize and to retaliate upon foreign industries. The overriding influence of international cartels and trusts is a new factor in the situation of world-economy, as it is developing to-day. Round no subject has such bitter controversy raged as round that of the comparative merits of Free Trade and Protection. Let it be noted here that Protection, as commonly understood and defined, is a systematic attempt to develop the industries of a nation by the imposition of prohibitive and discriminating duties on manufactured goods imported from other countries with a view to put an end to or minimise foreign competition. Import and export duties are the usual means

employed to protect and promote industries and to retaliate upon foreign countries for their policy of restriction. Dumping and anti-dumping measures illustrate the principle underlying this policy. Those who are oppsed to Protection, insist upon the absolute individual freedom of trade as being essential for the development of a nation's resources and regard interference of the State with the freedom of exchange and competition as detrimental to the best interests of the community, and every restriction of trade designed either to assist home industries or to do harm to another nation as a source of injury to one's own self as well as to others. Protection has reference, therefore, not only to restrictive import and export duties but also to other measures taken by the State, such as bounties and subsidies and favourable railway and ocean freights, for the protection and encouragement of national industry and trade.

The Protectionist's potent weapon, however, is the import duty with which he fights with the foreign manufacturer and seeks to keep out or restrict the import of his commodities in order to give a fair or favoured field to the indigenous producer. This policy is a legacy of the Mercantilist regime, and the spirit of the old commercial system survives to-day though the form of the protection given and the grounds on which it is given, have been slightly changed. Advocates of Protection also seek to reconcile their theory and practice to the general development of economic doctrines and thus to defend themselves from the criticism which is regarded as justified against Mercantilism. The preservation and encouragement of home industries, relief of unemployment, national defence and the maintenance of the high national standard of living and culture are among the chief grounds. Having regard to the fact that commercial rivalry was one of the causes of the world war, statesmen gave expression to the lofty sentiment that in future there was to be only one universal league of nations and that there were to be no separate cliques and groups within it. But these hopes have not borne fruit; and separate treaties of commerce are the order of the day again, showing that nationalism is too strong for cosmopolitan ideals. As we have pointed out, however, trade agreements and international understandings are a guarantee of some stability of amicable relations. There is a promising future for international action in this direction and even intense nationalism may be reconciled to the needs of freedom of exchange within reasonable limits.

Reference must be made in this connection to the creditable work which is being systematically done by some economists to emphasise the beneficent interdependence of nations in "world-economy," at Kiel and Leipzig in Germany, for instance, and to the writings of Professors Bernard Harms, Hermann Levy and Sartorius von Waltershausen, which have been already alluded to. These thinkers have laid stress on the solidarity of international interests and have demonstrated how economic intercourse is calculated to foster peace and prosperity in the world if those who direct national policies will avail themselves of the means ready to their hands. The World Economic Conference was welcomed on that account. Unfortunately economists can not build their conclusions and base their counsel on ideals and have to take proper account of nationalism as a reality and as an important factor in human society. World economy differs from national economy fundamentally: In the former, nations do not correspond to the provinces within a given nation and the ties of solidarity created by common laws, government and taxation, are wanting in it. As Dr. R. Stolzmann says, it is but right that England should strive to maintain a policy of free trade, but "when, as Ihering remarks, weak lambs join the lion's roar of freedom, it proves nothing else but that they are sheep".[1]

145. The Rival Views:—Opinion on the question of choice between the *laissez faire* doctrine and benevolent State intervention for the protection of national industries, ranges over a wide area. Some thinkers pin their faith to the 'natural order' and the beneficence of free competition; others, while accepting this doctrine in general, would relax its rigidity under certain exceptional conditions e. g. national securtiy and infant industries; while many thinkers maintain that under a system of natural liberty, a nation's prosperity is endangered and therefore State regulation of industry and trade, if not ownership as well, are absolutely essential. Dealing with the subject of international trade we have shown that in economic theory, exchange of commodities between nations as between individuals is advantageous to the parties concerned but that in applying the theory, certain peculiar circumstances have to be taken into account. As a practical measure, therefore, protection will not be a panacea for all economic ills as free trade will not prove uniformly

1 "Theoretische Grundfragen zum Problem Freihandel oder Schutzzoll?"

beneficial. Freedom of contract and competition are universally recognized as essential to ordered life and progress; the State is, however, allowed to interfere with it and to protect the debtors against rapacious creditors and helpless tenants against oppressive landlords and to prohibit and control the employment of women and children in factories. State interference is equally essential when the disturbance of internal equilibrium is caused by forces working from without. And this is achieved through protection.

Economists have taken pains to expose the subtle fallacies underlying the doctrines of Protectionism and Free Trade, and some of the absurdities of their positions, far from being obvious, are not easy to appreciate. The faith of the free trader in his favourite principle is as deep-rooted as the belief of his opponent in the beneficence of the panacea of protection, and the fiscal creed has become almost hereditary and amounts to a superstition in countries like England. It is necessary, therefore, to find out what truth there is in the contention of the two sides, particularly because what commercial policy it is desirable to pursue in India, will best be decided in the light of this discussion. The Protectionist is wrong, it is contended, in thinking that international trade is an evil, perhaps a necessary evil, and that he can restrict imports without hampering the course of exports which he is anxious to maintain or that he can tax or hurt the foreigner without injuring himself. It is by a division of labour and specialization among nations that the production of wealth can be conducted under the most economical conditions to the benefit of communities and of the whole of humanity. Competition gives stimulus to production and enables individuals and nations to give of their best. Protection levies a tribute on the whole community for the benefit of a section of it and the artificial fostering of industries is wasteful and demoralizing. If trade with foreign countries can do harm, internal exchange must be equally injurious. It does not really matter which industries flourish in a country so long as it can exchange its products for those of other nations and can secure therefor a greater amount of utility. Protection deprives economic activity of all stimulus which competition imparts to individual efforts, dulls the edge of industry, creates harmful monopolies and vested interests, engenders jealousies among nations and disturbs the peace of the world.

Protection can not admittedly work miracles and it must act within certain limits of general economic advantages. The free trader, however, does not take adequate account of other factors which are concerned in the problem. The analogy of the pacifist would here be instructive. He hates war and costly armaments. His is a noble ideal of universal peace and harmony. But what is his experience of the hard facts of past and contemporary history? Victory goes to the biggest batallions, and small and weak nations are crushed under the heels of ambitious neighbours. The number of independent nations has increased instead of decreasing, as a result of the treaties which closed the War. The League of Nations, so far as international trade, at any rate, is concerned, has yet to justify its existence, and President Wilson's 'fourteen points' have remained on paper only as pious wishes. The political idealist can not get rid of the fact of the existence of national sentiment, and the day is yet far distant when the world will become a joint family with the nations, small and large, as loving members. Then again, the suppression or subordination of national individuality, even if it were practicable, may not subserve the cause of civilization and progress, and the imposition of free trade under all conditions, can not be universally beneficial.[1]

While complete freedom of trade and harmonious international co-operation should be the ideal of each nation, communities must enjoy the opportunities of self-expression. Every nation must develop its own resources to the best of its capacity, and the world will be all the better for being constituted into a commonwealth of fully developed peoples. If and to what extent a nation should

1 "On the other hand, the free traders fail to make allowance for an importtant element in the problem. The essence of free trade is cosmopolitanism; the essence of protetion is nationalism. Free trade holds up to our contemplation the ultimate economic ideal, but fails adequately to reckon with actual forces. The universal republic is far in the distance, and the separate nations still have an important function to subserve in developing their own individuality and thus contributing distinctive elements to the common whole. Legitimate competition pre-supposes, as we have seen, a relative equality of conditions; as long as the growing nations of the world are in a state of economic inequality, we must expect and not entirely disapprove the effort on the part of each to attain equality by hastening its own development. Ultimately, no doubt, patriotism will be as much of an evil as particularism has now become; but in the present stage of human progress, patriotism is a virtue. Free traders overlook the sound kernel in what seems to be the apple of discord." —Seligman.

resort to protectionism must be decided on a review of several factors pertaining to the geographical, physical, political and social conditions of the nation. Protection is unsuited to countries the bulk of whose exports consist of manufactures which require free markets for their disposal. The land inhabited by the people may be inadequate for producing the necessary supply of food which must consequently be imported. Unfettered exchange of cereals and raw materials must be allowed by them as they will seek wider avenues for the sale of their own products. But countries otherwise circumstanced may find it beneficial to resort to protection directly in their own interests and ultimately in those of the whole world.[1] These may possess abundant raw materials and potential labour power but may be lacking in industrial organization. Foreign competition, unless checked and regulated, will prevent the national resources from being exploited. The history of economic development in U. S. A., Germany and Japan is eloquent on this point.

Some of the evils which come in the wake of Protection are patent, and can not always be successfully guarded against; but competition may be unfair and the advantages of free trade may be too dearly purchased. Cheap imports disturb a country's economic equilibrium, destroy old indigenous industries, prevent the rise of new ones and create unemployment. Capital may be lacking, power of readjustment is wanting and labour is not mobile. Even in free trade countries, the State interferes to protect the weak against the strong, the borrower against the lender, the labourer against the capitalist, the tenant against the landlord. Due care is thus taken to maintain a proper equilibrium of internal economic relations. Why then hesitate to follow a similar policy when the wave of disturbance comes from outside? Restriction may also become necessary for national defence, and the larger interests of the people may call for State intervention and the regulation of exchange. Even internal competition in a country can not be left entirely unfettered to produce its evil effects, and

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1 "But when the economic resources of a country are not yet fully developed, it may nonetheless be desirable to accelerate the pace in the interests of its own immediate national progress, with the idea that the contribution of fully mature and economically well rounded nations to the commonwealth of the globe will in the long run exceed the gain from an uneven and one-sided evolution."—Seligman.

the operation of the law of supply and demand can not always be trusted. International competition stands upon the same footing and calls for restriction even more urgently. No nation can afford to look on unconcernedly while its neighbours are arming and preparing to attack it. This is not a bogey conjured up by the imagination as the history of industrial and commercial combines will demonstrate. If another nation sets up a rival industry and promotes it by means of bounties and subsidies so as ultimately to kill your own, you have to take measures to protect it. Protection against depreciated currencies and dumping is thus admitted to be legitimate, and it is advocated in favour of infant industries. Foreign competition may, however, be quite legitimate and it is unnecessary to presume evil intent; and measures taken to meet it may, besides, recoil on the head of the protecting nation. Advocates of protection, in many cases, fail to appreciate the value of such competition which stimulates economy and improvement; but there are limits to it which must be recognized. Bolstering up of industries in the face of natural disadvantages, is indeed a wasteful and foolish proceeding, but impetus given by the State by means of import duties, financial assistance, scientific advice or otherwise, may create conditions that will prove favourable to the revival of old or the establishment of new industries. Protection is indeed liable to abuse, but so is free trade.

146. Indian View:—*We have briefly described in the last* chapter the economic revolution which took place in India in the course of the nineteenth century. England was, at the time the revolution commenced, in the grip of the protectionist and colonial policy. Heavy import duties were levied upon Indian manufactures going into England, and instead of conserving and improving the nascent industries of India, the East India Company looked only to its dividends and political power. When England was protectionist, India suffered from her protectionism; and when free trade became the fiscal creed of the country, India still continued to labour under a disadvantage owing to outside competition and the neglect of the indigenous industries. Indian people had little voice in the governance of the country and in the determination of its policy, fiscal or otherwise. Their interests could not, therefore, be safeguarded, when other interests, notably those of British manufacturers and merchants, came in conflict with them.

The failure of a few early efforts made to introduce modern industries into India with State encouragement was enough, according to the self-centred and *laissez faire* views which prevailed at the time, to lend support to the theory, (in its application to India,) that tropical countries with their abundant raw materials and trying climate, were not suited to the development of manufactures and must be content with agricultural pursuits. Direct State aid to the growth of industries was, on this theory, not to be thought of; and nothing was left for the government to do except to leave private enterprise and competition unfettered and to remove obstacles from the path of trade and to stimulate freedom of exchange. "The efforts of the state were concentrated on the improvement of communications and on facilitating the flow of trade, which continued, under the conditions above described, to consist mainly of exports of Indian raw material and imports of foreign manufactured products. But feeling which gradually arose among thoughtful men in India, that the existing conditions were unsatisfactory and were even inimical to national development, was well founded and accentuated by the growing pressure of foreign competition, and latterly by the stress of a terrible war, has culminated in a universal demand for a complete industrial system on Western lines."[1]

To those who were free traders by conviction or faith, it did not matter if, one after another, Indian industries decayed and the *country came to depend entirely upon agriculture.* They *rejoiced* that the foreign trade of India steadily expanded and pointed to it as a sign and measure of prosperity. Opponents of free trade wanted protection, but not for Indian industries. Indian markets were to be thrown more widely open to British manufactures[2] and closed to foreign goods. India has had no independent fiscal policy consonant with the opinion of the intelligent and educated public. Indian thinkers, enlightened by western education and equipped with a study of the history of western nations, however, came to reflect upon the

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1 Report of the Industrial Commission, page 2.

2 "Generally speaking, the duties on raw produce were at the rate of 3½ per cent. and manufactured articles at 3½ to 5 per cent.; but until 1848 these duties were doubled in the case of goods imported in foreign ships. After this date the nationality of the shipping was ignored but differential duties continued to be levied up to 1859 in accordance with the nationality of the goods, the duty on foreign goods being double the duty on British goods."—Report of the Indian Fiscal Commission.

economic condition of their country and felt convinced that India's poverty could not be remedied without a conscious effort on the part of the State to stimulate indigenous industry and Indian enterprise. France, America, Germany and Japan had adopted protection, they said, and asked why India should not do likewise.

The impression of Indian feeling, formed by an outside observer[1] like Prof. Lees Smith which has been referred to in the foot note, correctly reflects the situation. Being a confirmed believer in the doctrine of free trade, an examination of conditions in India, convinced him of the futility of protection and led him to the conclusion that 'India needs a strong free trade school among her thinkers and administrators.' Among the latter he may find a large number of free traders. But in the peculiar situation in which India stands, he hopes in vain for the establishment of an influential free trade school in this country among Indian thinkers. The latter appreciate the good points of the free trade position and are conscious of the drawbacks of protectionism. But in their view the balance of advantage lies in protectionism judiciously applied. Earlier Indian thinkers were strongly impressed with the blessings of free trade for India. They had been brought up and educated in an academic atmosphere of fredom breathed by Mill, Cobden and Bright and were led to believe in the beneficence of free imports and exports; but they found that the Indian fiscal policy was not genuine free trade and that the political and economic condition of India provided a clear case for the adoption of protection, or it came under the exceptions admitted by free traders themselves.

147. History of Indian Tariff:—Since ancient times customs and inland duties on traffic have been levied by Indian rulers mainly for the purpose of revenue. From Chanakya's Arthashastra and the Smrities one can see that elaborate regulations were drawn up and enforced with a view to tax and control trade. Imports were encouraged or restricted according as they were supposed to be specially advantageous or harmful. Government control in this regard was on a scale that would satisfy the extreme claims of modern

1 "*Public opinion in India is overwhelmingly protectionist.* If she were granted her fiscal freedom there is no doubt that she would use it to erect a high tariff which from the nature of her trade would be directed chiefly against British goods."—H. B. Lees Smith: India and the Tariff Problem.

protectionism and state socialism. This system continued for centuries. Finding that the inland duties were an impediment to trade, the East India Company abolished them in the forties of the last century and retained the low customs duties on imports and exports. The Mutiny was responsible for heavy military expenditure and the general tariff was raised from 5 to 10 per cent. As the finances recovered from the abnormal state into which they had fallen, the import duties were steadily reduced till in 1875, the general tariff was brought down to 5 per cent. and a number of export duties were abolished. The import duty on cotton piece goods which had been lowered to 5 per cent. in 1862, remained at that level. The self-interest of Lancashire revolted against this, and the British mill-owners brought pressure to bear on Her Majesty's Government to order the Government of India to remove the duty altogether. The instructions were duly obeyed and in 1882 India received free trade with a vengeance. For the next twelve years the Indian tariff consisted only of low duties on arms and ammunitions, liquors, salt, opium and petroleum. The tariff had included light export duties on a variety of goods which also were intended for revenue, and they too were gradually abolished, the duty on rice alone being retained after 1882.

The revenue needs of Government, which expanded with the fall in the price of silver, forced, in 1894, the restoration of the 5 per cent. tariff, with lower duties on such articles as machinery and steel and higher rates on liquors and tobacco. Two years later, the import duty on cotton piece goods was reduced to 3½ per cent. and an excise duty at an equal rate was imposed on all cloth manufactured in Indian mills. Lancashire once more triumphed and India's economic interests as also the opinion of the people and the Government of India, were set at naught. We shall revert to the cotton excise duties later. The low revenue tariff remained in force till the rates of duty had to be successively enhanced during the years of War. The yield of customs duties rose from 9½ crores in 1913–14 to over 27½ crores in 1921–22 and to over 50 crores in 1928–29. To fill its treasury, government raised the rate of almost every tax besides levying many additional ones. The principle underlying the tariff that necessaries of life and essentials of industry were to be exempted or lightly taxed and higher duties were to be imposed on articles of luxury, was still adhered to

as far as it was practicable to do so. In 1916 the list of exemptions was cut down and machinery, railway material and iron and steel were subjected to a $2\frac{1}{2}$ per cent. duty; and the general tariff was raised to $7\frac{1}{2}$ per cent. In 1917, the duty on cotton goods also was raised to $7\frac{1}{2}$ per cent., the excise remaining at the old level. The general rate was further raised to 11 per cent. in 1921 and to 15 per cent. in 1922. The rate on cotton piece goods was 11 per cent. and the excise was not disturbed. Luxuries like motor cars and watches were taxed at the rate of 20 per cent. in 1921 and at 30 per cent. in 1922; and sugar, matches and liquors came in for large increases, the duty on iron and steel going up to 10 per cent. in 1922. In 1916 the exports of raw and manufactured jute and of tea were taxed, the duty on jute being doubled in 1917. Two years later, an export duty was levied on raw hides and skins and it was described as a measure of protection for the indigenous tanning industry. The tendency now is to reduce or take off duties so far as this is permitted by the exigencies of the exchequer.

The principle of discrimination in favour of countries in the British Empire, consisting of a rebate of two-thirds of the above 15 per cent. duty, was introduced in that connection, at the same time; and there was apparent an effort steadily to extend its application. Protection was, however, deliberately adopted on a considerable scale only in July, 1924 with special legislation in respect of the steel industry, passed in the preceding month. Except for the protective duty on steel, the Indian tariff was a revenue tariff till the closing months of 1925. Several of the duties were levied at high rates solely with the object of securing revenue, but some of them, at any rate, could not but be protective in their effect though this favourable influence on indigenous industries was neither regular nor intended. The system of bounties and subsidies was likewise not favoured. We shall now proceed to consider how the policy of a purely revenue tariff has given place to a system of adulterated free trade or a diluted form of protection.

148. Birth of Indian Protectionism:—It has been shown in the first two chapters of this book how Indian political and economic thought took a nationalist turn in the closing decades of the last century and how this change was brought about by the contrast, which forced itself on the mind of the educated classes, between the

economic conditions in this country and abroad and the commercial and industrial policies which were pursued here and in other countries. Indian thinkers, though brought up in the traditions and atmosphere of individualism and *laissez faire,* came strongly to feel that a different attitude and policy in matters economic was required in this country if it was to progress and not to decline. It did not escape their attention that competition between a backward and helpless country like India and a progressive and powerful nation like England was neither fair nor beneficial. Patriotic Indians like Dadabhai Naoroji,[1] Ranade and R. C. Dutt, therefore, pleaded for a change in State policy and for constructive work to save and promote the development of indigenous industries. Mr. Ranade exposed the evils of the *laissez faire* policy pursued in India and showed how State assistance was needed for the economic development of the country. His essay on Indian Political Economy, which bears distinct traces of the influence of the National School of Political Economy and in which he attempted to apply the most recent economic theories to Indian conditions, has become a classical exposition of the attitude of Indian thinkers on the subject, and his lead has been followed by students in the present generation.

The origin of the Swadeshi movement, which has secured enthusiastic advocates among the best thinkers of the country, is to be found in their conviction that free trade is incompatible with healthy national economic development and that the country must adopt a policy of Protection. If the State does not stimulate industrial progress, it was argued, the people must be prepared to promote it by patronising home industries even at a sacrifice as consumers and investors. Protection, after all, imposes temporary burdens on the public through customs duties or bounties and subsidies. Government, as representing the community, is the proper body to arrange this. The Indian Swadeshi movement

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1 "I like free trade but after what I have said to-night you will easily see that free trade between England and India in a matter like this, is like a race between a starving, exhausting invalid, and a strong man with a horse to ride on. Free trade between countries which have equal command over their resources is one thing, but even then the Colonies snapped their fingers at all such talk. But what can India do? Before powerful English interests, India must and does go to the wall."—*The Poverty of India.*

transferred that function of the State to concerted public action.[1] The little political power which the constitutional reforms of 1919 placed in popular hands, was immediately utilised to promote this same cause. In a speech he made at Lucknow in 1907 on the Swadeshi movement, Mr. Gokhale traced the industrial decay of India and the harm which free trade had done to the country, and observed:—"The State by a judicious system of protection, should then ensure conditions under which new infant industries can grow up. And until the new industries can stand on their own legs, it becomes the duty of the State to have a protection wall around. This is what America—already one of the richest nations in the world, and one which will yet reach the foremost place—has done, and the case is the same with France and Germany." The Charkha and Khaddar movement, is nothing but a propaganda of the old Swadeshi cause, only in a more intensive and restricted form. It is also a protest against the apathy and free trade policy of government and an attempt at economic reconstruction. An up-to-date expression of opinion on the whole subject is to be found in the report of the Fiscal Commission and the debates in the Legislative Assembly on problems arising therefrom.

149. Right Policy for India :—This brief account of the views held on the important question of fiscal and industrial policy by Indian economic students and public men will show in what direction the thoughts of responsible educated men in this country have flowed and how our government is now veering to this opinion, thanks to the upheaval created by the war, to the political progress of the country and to a change in the angle of vision even of British statesmen. Their economic and historical studies have strongly impressed Indian thinkers with the beneficent efficacy of the measures which most foreign nations have taken during the last two

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1 Mr. R. C. Dutt's historical studies and his long experience as an administrator led him to similar conclusions. Speaking of the Swadeshi movement, he remarked :—"The Swadeshi movement is one which all nations on earth are seeking to adopt at the present day. Mr. Chamberlain is seeking to adopt it by a system of protection. Mr. Balfour seeks to adopt it by a scheme of retaliation. France, Germany and the United State and all the British Colonies adopt it by building up a wall of prohibitive tariffs. We have no control over our fiscal legislation; and we adopt the Swadeshi scheme, therefore, by a laudable resolution to use our home manufactures, as far as practicable, in preference to foreign manufactures."—Speech at the Benares Industrial Conference, 1905.

generations to promote their industrial development, and they have been convinced that the reasoning and conclusions of the advanced schools of Political Economy in the West, are applicable to the conditions of India rather than the theories of natural law, individual liberty and of free competition of the Orthodox school. They appreciate the free trade doctrine in the abstract and will be influenced by it only to the extent that they will desire that Protection to be adopted in this country should be of the right kind and the evils associated with it should, as far as possible, be avoided. Some of them will, more than others, press for the proper consideration of the interests of the consumers, tax-payers and the land-holding classes, and insist that the voice of labour will also be heard. But until conditions radically change, the national policy can not be that of absolute free trade.

The strongest objection to Protection is that it usually fails to produce the results expected of it, and those who propose a specific measure of protection, have to calculate carefully the effects it is likely to have on the economic condition of the different classes and interests in the country. Will the people receive a full recompense for the sacrifices Protection will exact from them ? Will not foreign capitalists and organizers of industries take advantage of State assistance and leave the children of the soil just where they stood before ? Is there not a risk of powerful combinations and trusts creating monopolies and screwing profits out of the poorer and the weaker classes ? Considerations such as these require the closest attention. Mr. Gokhale, for instance, faced the problem with a judicious frame of mind and weighed all the arguments that could be urged on both sides before pronouncing his opinion. When the question of the cotton excise duties was under discussion in the Imperial Legislative Council in March 1911, he gave expression to his view in regard to the Free Trade *versus* Protection controversy, which was in substance the same as the conclusion presented above.[1]

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1 Gokhale said:—"Coming to the larger aspect of Free Trade *versus* Protection, I would like briefly to state my position in this matter. I may say at once that by conviction I am not an upholder of Free Trade in all countries and at all times. Free Trade can no more prevail universally at present than any other noble ideal, for instance, the brother-hood of man... In the same way Free Trade for all countries may be all right in theory but it will be a long day before we shall have it in practice everywhere. And till that time comes, every country must take care of its economic interests in its own way."

It was of particular importance, however, that taking the word 'Protection' in its comprehensive sense, Mr. Gokhale proceeded to distinguish between the right and the wrong kind of protection :— "The right kind of protection," he said, "is that under which the growing industries of a country receive the necessary stimulus and encouragement and support that they require but under which care is taken that no influential combinations, prejudicial to the interests of the general community come into existence." "The wrong kind of protection, on the other hand," he continued, "is that under which powerful influences and combinations of interests receive assistance to the prejudice of the general community, the general tax-payers of the country. And I believe that the right kind of Protection, if available, will do good to India." As will be shown later, this aspect of the problem of Protection has been receiving due weight and that the attitude of 'hands off' towards industrial development has been materially modified. A Department of Industries, under a special Member, was long ago created in the Government of India for stimulating industrial developments; and the Provinces too now have similar departments under direct popular control. That little has been yet done by these departments, in the way of industrial development, is another matter.

The peculiarity of India's position to which we have adverted is that the people have still no effective voice in the government of the country and in the shaping of the national policy, economic and political; and the large industries and the growing foreign trade of the country are in the hands of non-Indians. Resistance to State action proceeds with special force from these two quarters. The constitutional machinery by which the wishes of the people can be enforced, though greatly improved, needs important adjustment. It has been pointed out how other than purely Indian interests are apt to carry weight with the government, and the Secretary of State for India who controls the Government of India, being a member of the British Cabinet, is swayed by the pressure of capitalists and manufacturers in England. If protection is, therefore, to be granted to Indian industries there must be a guarantee that the profits that will accrue, will remain in India and not be carried away by those who

have no stake in the country.[1] This aspect of Indian protectionism requires very careful consideration. There is a danger of purely Indian enterprise being sacrificed to foreign and non-Indian vested interests that may be created behind the shielding walls of protection. That the public and the legislature in India are alive to the risk of a policy of protection turning out more detrimental than free trade, may be seen from the report of the Fiscal Commission and the action taken to give effect to its recommendations. The risks adverted to here, however, do not render a free trade policy necessarily more adapted to the needs of India.

150. Indian Protectionism:—Till the middle of 1924, the Indian tariff was entirely on a free trade basis; and this policy as well as that underlying the imposition of the cotton excise duties was dictated by faith in Free Trade and by the influence of British industrial interests whose pressure was irresistible. It was and is the honest belief of some that free trade is the right policy to adopt in India in view of the undeveloped character of its natural resources and the poverty of its people who want a variety of cheap imports to improve their standard of living; thus the conflict of interest between the classes and the masses is brought out by some, and others argue that portection will benefit a few Provinces e.g. Bombay, at the cost of the agricultural provinces like the Punjab; while a few have made no secret of their opposition to Protection in India partly on the additional ground that it would be detrimental to the interests of English manufactures. It will be convenient to summarise the arguments in respect of Protection in India.

(1) A free trade policy in this country would mean only drifting along the whirling currents of the world's economic development; and philosophic resignation to the so-called laws of nature and passive submisson to organized foreign competition, will be nothing but courting disaster. The policy of drift, so long pursued, has

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1 Under these circumstances, Mr. Gokhale was constrained to hold that, on the whole, a policy of Free Trade, reasonably applied, was the safest policy for this country. He thought that "otherwise influential interests, influential combinations, and influential parties in England who can have ready access to the Secretary of State to whom we have no such access, will not fail to take the fullest advantage of the situation and this huge engine of protection, which is a vast power, will be employed not in the interests of the people of India, but in the interests of those parties."

already proved harmful, and in the international struggle for economic progress, this country must arm itself with the necessary equipment. The after-war slump has demonstrated how manufacturers have sold goods in foreign markets at prices below cost and in ruinous competition with their rivals. (2) The country has varied and abundant natural resources, but labour and industrial organization are not efficient and consequently its wealth-production is insufficient for the needs of an increasing population. Too much dependence on agriculture, under-production, severe pressure on the soil and unemployment or insufficient employment are serious drawbacks in the position. This state of things can not be ameliorated if we trust merely to individual self-interest and initiative. (3) The recognized scope of the functions of the State has been steadily widening in every progressive country; and the promotion of economic development is one of the important duties of government. (4) Trade is undoubtedly a friendly and mutually advantageous exchange. But unfair competition, struggle for existence and survival of the fittest admittedly figure prominently in international commerce, and hence the need of protection. (5) Supporters of Protection must not be understood to advocate an indiscriminate imposition of restrictive import duties on all manner of articles. Other countries like France and the United States of America, have had such high tariff walls erected to keep out and restrict the import of foreign manufactures. Conditions in India are not identical in many particulars and great forethought and discrimination must be exercised in framing the fiscal policy. (6) Landed and manufacturing interests are often in conflict, and the Indian tariff must be constructed with a view to the benefit of the country as a whole and to the position of the various industries in the country; and its effect on the different classes of the community must be carefully calculated. India is an extensive country with varied physical and economic conditions prevailing in its different parts, and the protection of one interest is likely to conflict with that of another. What is beneficial from the point of view of the nation as a whole, on a balance of considerations, must be adopted. (7) Import duties do not always tax the pockets of the foreign manufacturers; they may not check imports and may confer little advantage on the home producer. They will, in certain cases, only mean an addition to the sacrifice exacted from the consumer. Political consideration apart, boycotts of foreign goods are apt to prove futile, meaningless and even injurious. Discrimi-

nation in favour of home-made goods combined with constructive industrial effort is, however, efficacious, e. g. Swadeshi.[1] (8) If the State has to make the tax-payer contribute more largely to the public expenditure, import and export duties may prove convenient and productive. They constitute a favourite method of raising revenue, and the free trade conscience ought not to be shocked if such duties, when levied solely for revenue purposes, tend to have a protective effect. The protection, if it is irregular, uncertain and haphazard, must be systematised. (9) Here it must be made clear that many queer notions, full of fallacious reasoning, are current in connection with this subject in India as elsewhere ; and they have to be guarded against and corrected. All imports are thus often dubbed as dumping and all exports as a drain of the country's wealth. Ignorance and lack of clear thinking are responsible for the popular fallacies which are indulged in even by educated people in this regard. (10) When protection is once introduced, every industry is apt to demand it for itself, and a high tariff imposed for the benefit of one industry is likely to prove harmful to the interests of the others which also call for protection. Thus the claim of indigenous manufacturers of machinery, paper and other commodities are in conflict with important interests, and the protection of steel in India has already involved the grant of protection to the engineering and other industries. Great care and impartiality are needed to form a correct estimate of the rival claims of industries, and the legislature must be judicious and firm. (11) Restrictive or prohibitive customs duties, which Protection ordinarily implies, by themselves, will not, however, solve the economic problem. They are expected to assist the indigenous industries in their state of infancy or weakness, to compete with their foreign rivals, provided of course, the latter are discouraged by the duties and retire from the field or restrict their operation in the Indian market. An attempt will have to be simultaneously made to improve the conditions in which the industries are carried on and to bring them up to the level of their rivals. Care must be taken to see that Protection does not entail a sacrifice on the consumers while failing, at the same time, to make national production more efficient. Protective duties raise prices and the cost of living and of production; and unless they are

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1 See the Author's 'Indian Industrial and Economic Problems,' especially the article on Swadeshi and Boycott.

to be in operation for a temporary period and are to help to increase industrial efficiency, they will prove a useless burden. They must be clearly understood to be one of the ways of ensuring the success of a new undertaking and must not be allowed to dull the edge of enterprise and productivity. (12) The Indian Protectionist must also ask himself if Protection "might not merely mean that the manufacturer who now competes with you from a distance, would transfer his activities to India and compete with you within your own boundaries"?[1] This risk is not imaginary. Protectionism in India, as in other countries, is of course, intensely national; and it would obviously insist upon purely Indian enterprise being preferentially assisted by the State so that schemes of development started by non-Indians may not take unfair advantage. (13) In Western countries there are large reserves of capital, enterprise, technical knowledge, scientific experience and trained labour, and they are constantly progressing. India is still in the initial stage of industrial development and will meet with serious competition at every turn. (14) There will have to be a steady improvement of all-round efficiency; and the education, the outlook, and in fact, the whole life of the nation must be given a new twist. The awakening has begun and must become widespread and rapid. (15) When all the disadvantages of protection are weighed against its benefits, one can not but feel that in the present backward and helpless condition of India, with powerful industries established in foreign countries, the balance inclines in favour of a policy of State assistance to economic enterprise. And that is the decision which government in this country has been compelled ultimately to adopt. That by the spread of suitable education, by the grant of scholarships tenable abroad and in India, by a provision for scientific research and experiment, by demonstrations and by means of financial and other aid, the State can and ought to promote the industries of the nation, has been admitted even by staunch free traders. Experimental factories have been tried not without success, in the Madras Presidency. Demonstrations are being given in agricultural and manufacturing processes, and new models of agricultural implements and hand-looms are being introduced. But this work must be done on a larger scale than now and the problem of the methods by which capital and expert advice are to be provided to industries in

1. Sir W. Clarke: Speech in the Supreme Legislative Council, March, 1916.

the initial stages with sufficient guarantees, must be immediately tackled. Directors of Industries have to undertake this work of economic organization and they must proceed with the same enthusiasm as the Registrars of Co-operative Societies have done. (16) While following the *laissez faire* policy in the matter of trade and industries, the State in India has assumed several functions which in other countries, are left to private enterprize. The State here is in many respects, more national and socialistic than is usually supposed.[1] The Indian State regards itself as the universal landlord; it owns most of our railways and manages some of the most important among them directly; extensive irrigation works are financed, constructed and managed by it; it is the biggest banker in the country, and Lord Morley once boasted of the immense business done by the India Office; it manages metallic and paper currency and foreign exchange and lends capital to cultivators; it intervenes between private landlords and tenants on behalf of the latter; it seeks to protect the poor debtor against the exactions of the money-lender and to prevent land from passing from the hands of cultivators into those of other classes; it has either the monopoly or the effective control of the manufacture and sale of opium, salt and liquors; the Indian forests are a big state property, and the state is called upon to exploit it systematically and vigorously. The same principle has to be extended further and consciously applied to the industrial development of the country on lines which have now been approved by other national governments. (17) Protection in its various forms,—customs duties, bounties, subsidies, rebates and other schemes of State assistance,—is the price which a people has to pay for securing the advantage of economic progress which would otherwise not be attained and it must be regarded strictly from that point of view.

151. Fiscal Dependence of India:—It is a fact worth noting that the discussions of tariff problems in the Indian legislature and

1 "While the problem of unemployment and the question of checking the abuse of competition are engaging public attention in England the Government of India has long taken upon itself the duty of relieving distress and saving lives in times of scarcity and famine. Railways and canals have always been practically State undertakings. Various tenancy acts and other measures have been passed to safeguard the poor tenants against the exactions of the landlord. An attempt has been made to save the rayats from the exacting clutches of the money lender."—Sir T. Morison. See the Author's "Indian Industrial and Economic Problems," page 157.

outside have, until recently, been mostly of an academic character, with an air of unreality about them. Neither the government nor the people of India could take any final decisions and act upon them. The free trade conscience of the authorities in England who had the last word on these matters, and the pressure of vested interests in that country which they found irresistible, stood in the way of the pursuit of the national policy indicated in the above paragraphs. The demand for fiscal autonomy for India was based upon this anomalous position in which the Secretary of State could override the wishes of the people of this country strongly backed up by the Government of India and the Provincial Governments, as was done by Lord Morley. Whenever any question relating to fiscal policy or State assistance to industries, came up before the Indian legislatures, the government in India could not take action which it thought best in the interests of the country, and it had to confess frankly that "their policy is and must be the policy of His Majesty's Government." [1] It will be seen presently that a change was introduced by the Montagu-Chelmsford reforms, which promises to render India more or less autonomous in matters fiscal.

The self-governing Dominions enjoy complete freedom in this respect. Their governments have raised tariff walls against the manufactures of England and they have been allowed to do so. India, not being autonomous, however, the government here was not allowed to enjoy this necessary freedom to manage its affairs in accordance with the country's circumstances and needs, and thus its interests were ignored or were subordinated to other interests. This was a long-standing grievance, and none gave expression to it more bitterly than the Government of India itself. The Secretary of State, who is a member of the British Cabinet, is directly responsible to Parliament and is subject to the influences of British patriotism and party politics. Parliament itself does not take much direct interest in Indian affairs, and British manufacturers and ex-officials who are members of either House, are able to shape Indian policy. The latter can effectively thwart his measures of reform if the Secretary of State is independent-minded and progressive, and will strengthen his hands if he is opposed to progress.

As Mr. Gokhale has said, in the matter of securing this fiscal autonomy which India legitimately claims, "there is really not

1 Sir William Clarke in the Supreme Legislative Council.

much to choose between the two (now three) parties in England." The Liberal party, wedded to free trade, feels that India's salvation lies in the continuance of the existing policy and it says that India would be worse off if protection were to become the accepted policy of England. India's dependence would thereby be intensified and her industries would become more helpless than now. On the other hand, members of the tariff reform party point to the destruction of the indigenous industries as the evil fruit of free trade, and used to condemn the cotton excise duties in unsparing language. They, therefore, advise the Indian people to accept their scheme of preferential trade within the Empire, though they can not favour the idea of allowing India to frame her tariff according to her peculiar conditions and interests. The Labour party, which sympathises with India's political aspirations, is a strong believer in freedom of trade and is not likely to be eager to support her demand in this regard, as curtailment of the Indian market resulting from the protection of indigenous industries here, spells unemployment to British workmen. Whichever party may be in power and whether it be in England or in Australia, tariff policy is powerfully influenced by imperial and national considerations. Did India enjoy fiscal autonomy like the self-governing Dominions, her position would be enviable while she was courted in this way by two parties. As a matter of fact, however, whatever policy got ascendancy in England had to be the policy of India too, whether it was suited to her conditions or not. But this state of things can not continue and has already undergone a change.

The question of protection and fiscal autonomy for India is mixed up with the Imperial problem of preferential trade and defence and has invested the latter with special and immediate interest. Schemes of imperial preference and imperial reconstruction, have been discussed for several years, but their discussion has had only an academic interest. When the late Mr. Joseph Chamberlain started his campaign of tariff reform, the Government of India were sounded as to their views in the matter. The countervailing duties imposed on bounty-fed sugar coming from Germany and Austria-Hungary, in the time of Lord Curzon, had evoked a warm controversy in England, and that Viceroy had made, what was regarded as a contemptuous reference to 'the mutterings of the priests at the shrine of free trade.' No definite scheme of preferential trade had been placed before the

Indian government; but the latter expressed the view that India wanted a free hand and would not like to be involved in tariff wars.

152. Imperial Preference:—The Government of India was of opinion "that (1) without any such system India already enjoyed a large, probably an exceptionally large, measure of the advantage of the free exchange of imports and exports; (2) that if the matter were regarded exclusively from the economic standpoint, India had some thing, but not perhaps very much, to offer to the Empire; that she had very little to gain in return; and that she had a great deal to lose or risk; and (3) in a financial aspect, the danger to India of reprisals by foreign nations, even if eventually unsuccessful, was so serious and their results would be so disastrous that India would not be justified in embarking on any new policy of preferential trade unless assured of benefits greater and more certain than any which had so far presented themselves to the Government of India."[1] Later events, such as the occasional meetings of the Imperial Conference, the discussion of the problems of Imperial defence and trade and particularly the intimate association of the Dominions and of India with England in the war with Germany, put an altogether new complexion on the situation. Not that free traders were convinced that restriction of imports would do good to England or that preferential trade within the Empire would add strength to the economic position of the country. The resolutions passed by the Paris Conference did not meet with their hearty approval and the proposed arrangements about preferential trade within the Empire and with the Allies were declared to be unsound. But the struggle with a resourceful enemy, required an efficient organization and concentration of resources, and the voice of controversy was naturally silenced for the time being. Many difficult post-war problems also presented themselves for solution and a closer unification of the Empire was found to be imperative.

It appears as if the enemy, who had prepared himself for the war while the world slept in fancied security, took the Empire by surprise, and the latter made up its mind that this should not happen again. One of the guarantees of the future peace of the world was to be constitutional reconstruction of the Empire and with it the readjustment of the economic and fiscal relations of England and the Dominions.

1 **Webb: India and the Empire.**

The urgent need of such reconstruction impressed itself so strongly on the minds of people that it became the subject of animated discussion. So long as the struggle continued, attention had to be concentrated, however, on efforts to win the war. But any discussion of the issue of constitutional reconstruction naturally involved the consideration of the fiscal problem also. The general lines on which the tariff question could be decided, were clear. The integral parts of the British Empire must admit the goods of one another on specially favourable terms, if not absolutely free, and all of them must put more or less prohibitive duties on foreign imports, the Allies coming in for favourable treatment and friendly neutrals being treated more favourably than the enemies. This arrangement, like tariff reform schemes formulated before the outbreak of the war, was calculated to serve two purposes, first, to unite the Empire more strongly and make it self-supporting and secondly, to promote the industries of Great Britain which suffered from the competition of foreign countries like Germany, by ensuring to it a steady supply of food and raw materials and markets for its manufactures.

Under such a scheme of imperial organization, India was, of course, entitled to occupy the same position as the Dominions. The importance of India, arising out of her strategic position, her commerce, her raw materials, her size, her teeming population and her markets, has been recognized by free traders and tariff reformers alike. India's whole-hearted participation in the struggle, the sacrifices made by her people for the cause of the Empire and their readiness to go through thick and thin with their brother citizens of the United Kingdom and the Dominions, gave the Empire a new vision and a new sense of duty towards this country. But among those who thought and wrote about imperial reconstruction, there was hesitation and reluctance to accord to what was only a Dependency, the status and the privileges of the self-governing portions of the Empire. The fiscal organization of the Empire must be based on the principle of mutual concession and reciprocal sacrifices. And India's willingness to bear her responsibility as an equal partner in the Empire could never be doubted. But a disposition to treat her as a trusted dependent and to expect her to bear burdens without enjoying corresponding powers and rights, made all the difference.

153. Indian Government's Attitude :—It could not be demonstrated that India would benefit by consenting to be included

in schemes of imperial preference such as those adumbrated by tariff reformers and imperialists in England and in this country. India has claimed fiscal autonomy, because her people want freedom to frame their tariffs and protect their industries against external competition including British. Preferential trade, which will not be in consonance with this object, can not be acceptable. In their despatch of 1903, the Government of India frankly stated:—"All past experience indicates that in the decision of any fiscal question concerning this country, powerful sections of the community at home will continue to demand that their interests, and not those of India alone shall be allowed consideration." Speaking in the House of Commons in 1908, Lord Curzon reiterated these views. He observed:—"What has been our experience in the past in India of the manner in which the influence and power of the Secretary of State as the ultimate ruler of India are exercised in the direction of the fiscal policy of India? It is that in fiscal matters the Government of India has to take the views of the Secretary of State whether it agrees with them or not and these views are more likely to be guided and shaped by English than by purely Indian considerations." The economic development of India is bound up with fiscal autonomy for India and fiscal autonomy is bound up, in its turn, with popular control of the Indian government. These are fundamental factors in this problem of the fiscal organization of the Empire; and to speak of India's participation in a scheme of Imperial Preference without raising her status in the Empire to genuine equality with the Dominions and giving the people constitutional control, is utterly to misunderstand the whole problem.

The history of the cotton excise is eloquent of the conflict of interest between Great Britain and India, of the stand which the Government of India has taken against the selfish obstinacy of Lancashire and the continued victory of British manufacturers over public opinion in this country. It will be shown in a later section how political power could not be indefinitely exercised in this way for the benefit of England and at the cost of India, and how the distrust, created by the cotton excise, of the declared intentions of British policy towards the aspirations of the Indian people, at last forced the concession of a substantial measure of fiscal autonomy to the Government of India. Several Finance Members and other members of that government have been genuine free traders and have honestly felt that protection

would prove harmful to the best interests of this country. But even they could not conscientiously support the cotton excise duties and found a relaxation of the strict free trade policy imposed on them from above, to be necessary. Thus when in 1910, the impending extinction of opium revenue compelled the Indian Finance Member to levy additional taxation and to raise customs duties on certain articles, he had to disown all intention to frame "a Swadeshi budget" and to declare: "I think Swadeshi is good; and if the outcome of the changes I have laid before the Council result in some encouragement to Indian industries, I for one, shall not repent it, but I would emphasise the fact that the enhanced customs duties are attributable solely to the imperative necessity of raising additional revenue."[1] He then went on to point out that even in Free Trade England considerable revenue duties had been imposed for revenue purposes and that "in countries which depend mainly on agriculture, where the population is poor and there are no large and profitable manufactures it will be long before you can dispense with customs receipts as a part of the revenue essential for the administration of the country." Here we notice (i) the Finance Member's anxiety to disown all idea of imposing duties for protective purposes and the apologetic tone he adopts for appearing to frame a Swadeshi budget; (ii) the necessity he feels to enhance customs duties for providing a larger revenue; and (iii) his conviction that in an agricultural and backward country like India, the government must depend, to a considerable extent, upon customs receipts as a part of its revenue. There were several directions in which more liberal expenditure was urgently needed e.g. expansion of education and improvement of sanitation; and more reliance had to be placed upon this form of indirect taxation to provide the funds required. Faith in the free trade doctrine could not, therefore, be allowed to prevent the Finance Member from imposing import and export duties, though they might have a protectionist tendency.

154. Fundamental Principles:—Leaving aside the extensive controversial literature which has appeared on this subject,[2] we may proceed to point out the fundamental principles which are

1 See Lovat Fraser's Lord Curzon and After, page 347.

2 See "The Colonial Conference, the Cobden Club's Reply to the Preferential Proposals"; the Tariff Reform League's Pamphlets; and Report of the Indian Fiscal Commission.

involved in it. (1) In the first place, in whatever fiscal arrangement is proposed, representatives of the people of India must have an effective voice in the discussion and determination. The self-governing Dominions struggled to obtain this fiscal freedom and equal partnership in the Empire, and to-day they are acting as the equals of the United Kingdom. In 1859, the Finance Member of Canada administered a rebuke to the Colonial Secretary when the latter tried to interfere with the fiscal rights of the Colony. He said :— "Self-government would be utterly annihilated if the views of the Imperial Government were to be preferred to those of the people of Canada. It is, therefore, the duty of the present Government distinctly to affirm the right of the Canadian Legislature to adjust the taxation of the people in the way they deem best—even if it should unfortunately happen to meet with the disapproval of the Imperial Majesty."[1] The new partnership concedes to the Colonies a share in the shaping of the destinies of the Empire which was formerly entirely in the hands of the British government. Owing to the recent war, this partnership in the British Commonwealth of nations became more real and live, and now means virtual independence, tempered with common loyalty to the Crown and to traditions and sentiment of race.

(2) India must be treated on terms of equality with the Dominions in this respect, and the concession of justice must be preceded by the grant of fiscal autonomy. The first without the second is futile. The concession of the nominal equality of status in the Empire and of representation in Imperial and international conferences will not be enough. A complete change of heart and equality in deed as well as in word are essential. It may be said that this is impossible so long as India is not a fully self-governing Dominion. But if that is so, it is useless to talk of India's equal status in the Empire. (3) The Government of India, which will have to be endowed with full fiscal freedom must also, as a condition precedent to a participation of this country in an arrangement of preferential trade, be made amenable to the control of the people. The present fiscal autonomy of India is obviously partial and not wholly satisfactory. The above three things are inseparably bound up with one another. When these conditions are satisfied, it will be perfectly fair to expect from India all the sacrifices which imperial responsi-

1 Percy Hurd and Archibald Hurd : The New Empire Partnership.

bility will throw on her shoulders. The main object of Imperial preference is the consolidation of the Empire and mutual aid and sacrifices for the promotion of the material prosperity of the parts as well as of the whole. Every measure that enriches the component parts enriches the Empire, and no tariff scheme will be acceptable that is calculated to injure the individual interests of the Dominions or of India. The effective organization of the defence of the Empire is a large and important problem. And India can render considerable help in solving it by contributing a small naval force as well as an army of her own. But in order to enable her to shoulder her increased responsibility she must be allowed to strengthen her financial and economic position. India's new status was recognized by her representatives (of course, nominated by an unresponsible government) being admitted to the Peace Conference and other international conferences, and her being made an original member of the League of Nations along with the self-governing Dominions. And thus Great Britain would claim from India sacrifices similar to those made by the latter. But does India enjoy real fiscal autonomy like the Dominions and are the sacrifices expected of her truly similar ? These questions must be satisfactorily answered before Britain's claim can be admitted.

155. The Transition :—The question of Imperial preference and Protection is no longer one of a purely academic character and has now become a live issue of practical politics. Without committing the country to the abandonment of free trade and the acceptance of protection as a national policy, the Coalition Government in Great Britain introduced into its budget for 1920-21, the principle of Imperial preference by lowering the existing import duties slightly in favour of Empire products like tea, coffee, tobacco and sugar. This measure entailed an insignificant loss of revenue to the British exchequer and was not open to the usual free trader's objection, as it would cheapen and not make dear the food imported into the country. But the adoption of the principle of preference in England raised the important question about the reciprocal concessions other parts of the Empire would give to the country. The Dominions have retained their preferences for Empire goods, originally granted without any corresponding concession from Great Britain. In moving, in the Central Legislative Council, for the appointment of a committee, in February 1920, to

examine trade statistics and to report, 'whether or not it is advisable to apply to the Indian customs tariff a system of preference in favour of goods of Empire origin,' Sir George Barnes made it clear that the time had arrived to examine the question afresh.

It is necessary to state here that leaving the general question of preferential trade within the Empire to be decided later, the Government of India had, in 1919, already imposed a 15 per cent. duty on the exports of raw hides and given a preference of 10 per cent. in that connection in the form of a rebate to the other constituent parts of the Empire. This step was taken with a view to protect the many tanneries which had been established in this country during the time of war to supply munitions to the government, and the preferential treatment was intended to promote the development of the tanning industry in the Empire so that it might become self-supporting in respect of leather goods. The export duty and the rebate did not, however, work satisfactorily, particularly owing to the economic depression prevailing all over the world, and it had to be reduced in March 1923, to an all-round rate of 5 per cent.

Lord Curzon's government had deprecated the involving of India in any scheme of Imperial preference, and the Committee mentioned above, examined recent trade statistics in relation to Sir Edward Law's minute attached to the Indian government's despatch of 22nd October, 1903, on that question. With reference to the apprehension of retaliatory measures on the part of foreign countries the Committee was of opinion that 'in view of the demand for our raw materials, there is no danger to be feared on this score and that the apprehensions of Lord Curzon's government in respect of this particular aspect of the question would, in present circumstances, be unreal.' As regards the loss and profit likely to arise to this country, the Committee expressed the view that higher duties imposed upon foreign imports, the existing tariff being retained for revenue purposes, would result in the case of Empire goods, in enhanced prices for the Indian consumers and that the benefit from an increased market for our exports within the Empire, was limited. The general conclusion of the Committee, therefore, was that 'India is neither likely to gain nor to lose appreciably on the balance by the adoption of a moderate preference in our import duties.' The Committee recommended that the whole question should be examined by a strong committee.

The effect of the constitutional reforms of 1919, was not to make the Government of India responsible to the Legislative Assembly; and the Secretary of State for India's general control over it, was retained. It will suffice to state here that the proposed convention by which the Indian government would generally be allowed to have its own way in framing its tariff, and the Secretary of State's interference would be confined to cases in which the obligations of the Imperial Government to foreign nations would make it necessary,[1] was a decided step in advance over the old position in which the Secretary of State dictated its fiscal policy to the Government of India, especially because the latter was to come under greater influence from Indian public opinion, there being three Indian members in the Viceroy's Executive Council and a large majority of elected members in the central legislature. The Joint Select Committee of Parliament was quite explicit in declaring that fiscal autonomy had to be conceded to India but that it could not be guaranteed by statute 'without limiting the ultimate power of Parliament to control the administration in India and without limiting the power of veto which rests in the Crown.' It was urged further that neither of these limitations found a place in any of the statutes in the British Empire. The Joint Committee's argument in favour of a convention in preference to a statutory provision appears to be conclusive though, of course, every thing would depend upon how the convention would be worked. What was not quite clear was the exception to the Indian government's fiscal freedom in cases where the Secretary of State's intervention is allowed for safeguarding 'any fiscal arrangements within the Empire to which His Majesty's Government is a party'. It was apprehended that this would imply that India would have to acquiesce quietly in any scheme of Imperial preference which His Majesty's Government might adopt, irrespectively of Indian public opinion and the opinion of the Government of India. Such eventualities were not unlikely, and in those cases, it was feared that India's fiscal autonomy would be nothing more than a name.

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1 The Joint Select Committee of Parliament on the Government of India Bill, 1919, stated in its report:—"Whatever be the right fiscal policy for India for the needs of her consumers as well as for her manufacturers, it is quite clear that she should have the same liberty to consider her interests as Great Britain, Australia, New Zealand, Canada and South Africa."

156. Industrial Policy:—For years together, before the recent war, public opinion in India urged upon government the imperative necessity of its taking varied active measures for the promotion of industries in the country, and many of the Provincial governments had commenced efforts, inadequate and unsystematic as they were, in this direction. The Madras Government, for instance, introduced into its Province a number of new industries by the demonstration of their commercial success. But the local European community interpreted this as a serious menace to private enterprise and unwarrantable State intervention in affairs which ought to be left to private enterprise; and when the Government asked the Secretary of State's sanction for a larger scheme of industrial development, Lord Morley, in his despatch of 29th July, 1910, deprecated the diversion to State-managed commercial enterprise, of funds which were urgently required for the extension of industrial and technical education. He laid down the State's attitude in this respect in the following words:—"The policy which I am prepared to sanction is that State funds may be expended upon familiarising the people with such improvements in the methods of production as modern science and the practice of European countries may suggest; further than this the State should not go, and it must be left to private enterprise to demonstrate that these improvements can be adopted with commercial advantage."[1]

The 'deadening effect produced by Lord Morley's dictum' was a decided set-back to the desire of the Indian government to pursue an active policy of industrial development by means of demonstration and otherwise. Lord Crew, in 1912, while accepting the general principle laid down by his predecessor, put a liberal interpretation upon his dictum and showed how it gave very wide scope to the Indian government for doing what it wanted, viz. the demonstration of the commercial possibilities of certain industrial processes and the advantages of improved machinery. Even within the limitations imposed by Lord Morley on the sphere of the State's industrial activities, a great deal could have been done; but the Government of India 'had neither the organization nor the equipment to give effect even to the comparatively limited policy sanctioned by Lord Morley.' But the pressure of enlightened public opinion on

1 **Industrial Commission's Report.**

government continued and the vast industrial possibilities and serious drawbacks of India were thrown into relief by the experience of the earlier period of the war. In the despatch of 26th November, 1915, Lord Hardinge's government put its deliberate opinion on record that " it is becoming increasingly clear that a definite and self-conscious policy of improving the industrial capabilities of India will have to be pursued after the war, unless she is to become more and more a dumping ground for the manufactures of foreign nations who will be competing the more keenly for markets, the more it becomes apparent that the political future of the larger nations depends upon their economic position." That government made it absolutely clear that 'after the war India will consider herself entitled to demand the utmost help which her Government can afford to enable her to take her place, so far as circumstances permit, as a manufacturing country.'[1]

157. State Purchase of Stores:—*Intimately connected* with this subject is the question of the purchase of the stores required by the various departments of the Indian governments. These stores, so far as they are imported, were, for years, purchased mostly from British manufacturers by a department of the India Office, and Indian industrialists and merchants were pressing for a modification of the system so as to allow of the adoption of a more liberal policy in favour of purchasing articles of local manufacture on a larger scale. The value of government stores imported into India in 1913–14 was £ 5·3 million and in 1920–21, £ 10·5 million. The total average value of government and Railway stores can not be annually less than Rs. 15 crores. More than forty years ago, government enunciated the policy of purchasing their stores requirements, as far as practicable, in India whether the articles were locally manufactured or were of foreign origin but were supplied in this country. The rules made in this behalf were not, however, given full effect to and Indian industries and commercial enterprise did not receive the encouragement anticipated. It was pleaded that it was desirable to inspect the stores in the process of manufacture and that from the points of view of quality, price and convenienee, purchase in England was advantageous. As a *steadily increasing number and variety of*

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1 See note by Pandit Madan Mohan Malaviya, Indian Industrial Commission's Report, Pages 313–317.

commodities is being either manufactured in India or is supplied by commercial firms in this country, the force of this argument has been weakened. The question assumed greater importance in view of the post-war decision of the government to spend Rs. 150 crores on the railways in five years. It had been examined by the Industrial Commission which made certain recommendations, in view of the failure of the indenting officers, through lack of information about sources of supply and prices and of an inspecting agency in the country, to avail themselves of the stores purchase rules, in favour of the creation of an expert central agency that was calculated to assist in the attainment of the object aimed at. It was further investigated by the Stores Purchase Committee of the year 1919-20, which gave advice as to the character of the organization to be set up. Thus came into being the Indian Stores Department with the Chief Controller of Stores at its head. There is now in London a High Commissioner and a Trade Commissioner for India, and the former looks after the purchase of stores on behalf and under the direction of the Government of India. The stores purchase rules were further reconsidered with a view to meet the claim of Indian opinion that a fair opportunity, if not preferential treatment, should be given to industrialists and traders in this country in that respect. In May, 1924, government issued the modified rules, the main features of which consisted "in the assertion of a more definite preference for stores produced and manufactured, wholly or partly, in India, an important extension of the power to purchase imported stores and the introduction of a central purchasing agency in India, namely the Indian Stores Department." All purchases of stores are, by no means, covered by the work of this newly created body; and criticism of Government's policy with respect to purchases in Europe, still continues.

The points that claim attention here are: (1) the Indian demand that the State should encourage indigenous enterprise, capital and labour in its purchase of stores; and the fact that British firms carrying on business in this country have supported this demand; (2) the interests of the tax-payer who should not be made unduly to undergo a sacrifice involved in the government's purchase of locally-made or locally-procured articles in preference to cheaper imported stores; (3) the desirability of India making purchases in the cheapest foreign markets and not necessarily from British manufacturers and

firms in cases where stores have to be purchased abroad; and the complaint that Indian orders are going out of the Empire; (4) the expectation of British firms that on the principle of Imperial patriotism and on the authority of political power, they should be given preference over foreign manufacturers though their own goods may be dearer; and (5) the balance of considerations in favour of State stores being purchased in India. The system of stores purchase thus involves the principle both of the encouragement of Indian industrial activities and of the preference claimed for Empire-produced goods. As an illustration it may be stated that the Sheffield Chamber of Commerce once tried to bring pressure to bear on the India Office, "urging that British firms are entitled to some special consideration, even in face of slightly higher prices on the ground of this country's (Great Britain) services in protecting and promoting the welfare of India, and claiming that British products are better and wear better than foreign."[1] The purchase of stores in India is, of course, subject to the condition that the quality of goods supplied is good and the prices are not unfavourable. Business opinion wants the State to adopt the system of rupee tenders for delivery in India so as to place indigenous enterprise in as favourable a position as foreign competitors. It likewise urges the rapid expansion of the scope of the work of the Indian Stores Department and the corresponding reduction of the work of the London Department. The work of the new department in India has already resulted in a good deal of economy as well as encouragement to local enterprise, but the proposed expansion has not still been given effect to.

The working of the Indian High Commissioner's department leaves much to be desired. The declared policy in this matter is that tenders must be invariably invited, that requirements should be widely advertised in Europe and America and that, other things being equal, the lowest tenders should be accepted; but effect is given to it only partially. Tenders are not often invited and requirements are not publicly advertised on one ground or another. The High Commissioner for India in London states that nearly four crores worth of stores were purchased in this manner in 1928-29. The value of the stores for which tenders were obtained through adver-

1 The Times Trade Supplement: Engineering Section, 17 th June, 1922.

tisement in that year, was estimated at £ 5,747,000 as compared with £ 3,998,000 during the preceding year. Stores for which tenders were obtained without advertisement were £ 1,334,000 in 1928-29 as against £ 1,789,000 in the previous year.

158. Industrial Inquiry :—The circumstances which led to the appointment of the Industrial Commission, the recommendations of that Commission, the work of the Indian Munitions Board and the industrial prospect opened by it, the accumulation of capital rendered possible by war profits, the demand for and the measures taken in connection with economic reconstruction in England, the discussion of the problem of Imperial preference and last, but not the least, the pointed attention which was directed to India's political and economic situation and aspirations by the active discussion of constitutional and administrative reforms that culminated in the enactment of the Government of India Act of 1919,—all these contributed to place the question of India's industrial and fiscal policy on an entirely new basis. The authors of the Joint Report on constitutional reforms were emphatic in their declaration that "on all grounds, a forward policy in industrial development is urgently called for, not merely to give India economic stability; but in order to satisfy the aspirations of her people who desire to see her stand before the world as a well-poised up-to-date country." They were doubtful about the supposed advantage of a policy of protection to India and thought that the reasoning supporting it was full of fallacies; but they were certain of one thing viz. Indian distrust of the disinterestedness of the British advocates of free trade for this country and the unwillingness of educated Indians to submit to dictation from outside in fiscal matters.[1] They, therefore, advised that this prejudice should be removed and suggested that a large measure of freedom should be conceded to India in the framing of her tariff.

The strength of the case which exponents of Indian economic thought had striven to make out in favour of a deliberate State

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1 "The theoretical free trader, we believe, hardly exists in India at present. As was shown by the debates in the Indian Legislative Council, in March 1913, educated Indian opinion ardently desires a tariff......so long as the people who refuse India protection are interested in manufactures with which India might compete, Indian opinion can not bring itself to believe that the refusal is disinterested or dictated by care for the best interests of India."

policy of industrial development, was thus frankly acknowledged and all their arguments in favour of that policy, were repeated by Mr. Montague and Lord Chelmsford in their report on the proposed constitutional reforms, though they could not support a protective tariff and had, in fact, no proposals to make in that behalf, not being immediately concerned with the subject. The Industrial Commission had fully endorsed such views and thus lent the weight of its authority to the opinion which had long been held and persistently expressed by Indian thinkers, with regard to the economic helplessness of the Indian people and the State's apathy with respect to economic development. The Commission's conclusions in this connection are worth quoting. It says:—"The industrial system is unevenly, and in most cases inadequately, developed; and the capitalists of the country with a few notable exceptions, have till now left to other nations the work and the profit of manufacturing her valuable raw materials, or have allowed them to remain unutilized. A powerful, well-directed stimulus is needed to start the economic development of India along the path of progress. Such a stimulus can only be supplied by an organized system of technical, financial, and administrative assistance." [1]

The Commission was not asked to pronounce an opinion on the right fiscal policy for India, and therefore, its recommendations suffered from a lack of completeness. It was felt that the whole problem of the Empire's fiscal policy and relations would be better decided after the close of the war. A measure of fiscal autonomy was, however, conferred on India and the government declared itself favourable to the essential policy recommended by the Industrial Commission and urged by public opinion. The joint select committee of both Houses of Parliament, appointed to consider the Government of India Bill of 1919, realized the force of the views expressed in the Montford report referred to above, and recommended that though fiscal autonomy for India could not be provided for by statute, it was possible and desirable to create a convention according to which the Secretary of State should, as far as possible, avoid interference on this subject when the Government of India and its legislature are in agreement and that "his intervention, when it does take place, should be limited to safeguarding the international

1 Report, page 290.

obligations of the Empire or any fiscal arrangements within the Empire to which His Majesty's government is a part."

159. The Fiscal Commission :—By the time the Montford reforms took effect, the ground had thus been prepared for the inauguration of a system of protective tariffs by the steadily growing volume of public opinion in its favour, by the impossibility of government being able any more to resist it and by the high level to which the tariff had already been raised owing to urgent revenue needs during the war. The concession of a measure of fiscal autonomy to the Government of India under the constitutional Act of 1919, naturally provoked in the first reformed central legislature the demand that the question of national tariff policy should forthwith be referred for inquiry to a commission as recommended by a committee appointed in 1920 at the instance of the Supreme Legislative Council. Government responded and appointed the Fiscal Commission of 1921 to investigate the problem in all its bearings: "to examine, with reference to all the interests concerned, the tariff policy of the Government of India, including the question of the desirability of adopting the principle of Imperial preference, and to make recommendations." Almost all the Indian witnesses who gave evidence before the Commission, plumped for protection and several Europeans also joined them.[1] It was natural that every one interested in any particular industry, should have asked for protection for it; but many European witnesses were not very enthusiastic about protection. On the question of Imperial preference, opinion was clearly divided and the Indian view was distinctly not favourable to it under existing conditions.

A review of the economic condition of India convinced the Commission[2] that industrial development was essential for the well-being and progress of the people of the country. It weighed the pros and cons of the Free Trade vs. Protection controversy and came to the conclusion that protection was, on the whole, the most

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1 "The watchword among Indian politicians, industrialists and business man to-day is protection for Indian industries and in as much as the United Kingdom supplies 61 per cent. of India's imports it is fairly obvious against whom the protection would be levied."—Ainscough.

2 A summary of the report of the Fiscal Commission will be found in an Appendix to this chapter.

suitable policy for India. The Commission was, however, impressed with the dangers and the disadvantages of high tariffs and added the important proviso that protection recommended by it, was to be applied with discrimination, "so as to make the inevitable burden on the community as light as is consistent with the due development of industries, and to avoid abrupt disturbances of industrial and commercial conditions." The main idea underlying "discriminating" protection was that the industry to be assisted should be deserving of public help and that the sacrifice entailed on the consumer and the tax-payer should be compensated in the long run by an unmistakable balance of advantage to the country. The three principal conditions laid down, therefore, are that (1) an industry proposed to be protected should have some substantial natural advantage in its favour; that (2) the products of the industry should have a sufficiently large market in the country and that (3) the industry should be capable of being carried on without protection after a reasonable period of time. The cotton excise duty never had a friend in India and it was thrust down the throat of the Government of India by the Secretary of State under the political pressure of Lancashire. The Commission admitted that the duty was a political blunder; and while not prepared to condemn it on the purely economic ground, it recommended the immediate abolition of the excise so as to provide the government and the legislature a clean slate to write on. With regard to Imperial preference the Commission recognized that with the predominance of British manufactures in the Indian market, this country had little to offer as a concession and little to gain as compensation for the loss that would be involved; still it did not want India to remain outside a scheme of preferences within the Empire and expressed the opinion that "a free gift from India, however small, would be welcomed by the United Kingdom as a gesture of friendship and as a proof that India realized her position as a member of the Empire."

The chairman and four other Indians on the Commission, dissented from their colleagues mainly as regards the emphasis to be laid upon protection as the deliberate policy of the State, the immediate and unconditional abolition of the cotton excise and the importance to be attached to the operation of the principle of Imperial preference. They felt that the support given to the principle of protection by the majority was half-hearted and wished

that "there should be an unqualified pronouncement that the fiscal policy best suited for India is protection." Every thing considered, it is imperative "to abolish the cotton excise duties at once" was the decided opinion they gave on this question, which had caused so much bitterness in the country. But whereas the political injustice of the impost was admitted on all sides, financial justification was pleaded in favour of its continuance. It was also argued that it should be open to the government to reduce the import duty on foreign cloth if the excise was abolished in as much as the industry wanted bare justice and not protection. The question was further complicated by the increasing imports of Japanese cloth at competitive prices. The minority of the Commission was in favour of the principle of Imperial preference, but on the distinct condition that "India should, in this matter, be put on the same footing of freedom as is enjoyed by the self-governing Dominions and effective power should, in this connection, be vested in the non-official members of the Legislative Assembly." They also recommended that as foreign capital invested in industries in India will easily profit by a policy of protection, it should be subjected to certain restrictions designed to enable Indians to share in its control and calculated to benefit the people of the country as compensation for the sacrifices they would be called upon to bear. Lastly, the minority dissenting from their colleagues, insisted that the Tariff Board proposed in the body of the main report, consisting of a trained lawyer as president and two members of integrity and independent views, should be elected by the non-official members of the Indian legislature. The Board was, of course, necessary to scrutinise the claims of industries to protection and to give advice to the government and the legislature as to the action required in each case.

160. India Becomes Protectionist:—By the beginning of 1923, the government in India had travelled so far along the road to protection that a formal declaration in favour of that principle and the adoption of suitable measures to give effect to it, had become inevitable. A resolution was, therefore, moved in the Legislative Assembly on behalf of government accepting the principle of State encouragement of industries by means of "discriminating" protection and favouring the constitution of a Tariff Board as an investigating and advising body. The government spokesman pointed out the difficulties and the risks of the step that was being taken

and stated that if the larger body of the agricultural and the consuming classes had been in a position to exercise their legitimate influence, protection would hardly have become a question of practical politics. His speech made it quite clear that the logic of events and the pressure of educated public opinion had forced the hands of an unwilling government. However reluctantly it might be, the first practical step was immediately taken and the machinery of protection was set in motion. The Tariff Board was appointed in July, 1923 and the claim to protection preferred by the steel industry, was referred to it for investigation and report.

The Tariff Commission had specifically recommended that on account of its national importance and favourable prospects, 'the question of extending protection to manufacture of steel should be one of the first subjects for enquiry by the Tariff Board.' The Tata Iron and Steel Company had already made an urgent appeal to government for tariff assistance. It was the only firm in the country, at the time, manufacturing steel. Commencing production in 1912, the company had rendered great national service by supplying steel rails during the war when imports were difficult to secure. Large profits which high prices had enabled the company to distribute in the time of temporary prosperity, dwindled and threatened to be converted into losses in the post-war slump when prices declined and foreign competition menaced the very existence of the national industry. The Tata Company was carrying out extensions capable of increasing its output threefold and raising its capitalization to the neighbourhood of 21 crores. Till the whole plant was in operation and the full output was obtained, the overhead and the works costs were bound to be high and the company could not sell at a profit while foreign steel was landed in India at very low prices. Great Britain and Belgium, India's largest suppliers of steel, were also suffering from depression and high operating costs and had to sell their stuff at such prices as they could obtain, the latter country being assisted by a depreciated exchange.

After an exhaustive public enquiry in which all people interested in the industry and likely to be affected in one way or another, were given an opportunity to put forward their views, the Tariff Board came to the conclusion that the manufacture of steel satisfied all the three conditions which the Fiscal Commission con-

sidered should be satisfied in ordinary cases by industries before their claim to protection could be entertained and further thought that it was an industry essential for national defence and therefore of great importance on national grounds. The amount of protection was measured by the Board by the difference between the price at which steel was likely to be imported from abroad and the price at which the Indian manufacturer could sell at a reasonable profit. Specific duties of Rs. 30 to Rs. 40 per ton were proposed for different classes of steel in the place of the uniform 10 per cent. duty, and such kinds of steel as were not likely to be manufactured in India, were not touched. In order to minimise the increase in the cost of railway transport, bounties were proposed in the manufacture of medium and heavy rails and fish plates, ranging from Rs. 30 per ton in the first year to Rs. 26 in the second and Rs. 20 in the third. The scheme of protection was limited to three years, and at the end of that period a fresh inquiry was to be made. The recommendations of the Board were based upon the important principle that whatever protection was granted to an industry, must be effective i. e. must be adequate for its purpose, and therefore it recommended that if owing to any reason, it was found that steel was entering into the country at a price calculated to render ineffective the protection afforded by the tariff, government should have the power at once to increase the import duties to any extent deemed to be necessary.

161. Protection in Operation:—Tariff protection is such a complicated business that care has to be taken to see not only that it is effective but that it does not unduly prejudice other important interests. The products of one industry are often the raw materials of other industries, and by raising the price of the protected commodity, a high tariff increases the works costs of other industries. Steel enters into the manufactures and industries carried on by several individuals and firms; and their claims to compensating protection had to be considered, and where reasonable, had to be conceded. Thus engineering firms fabricate steel and use it for the making of bridges, tanks and towers and the construction of houses and sheds. The imports of fabricated steel had consequent-to be subjected to a higher duty in order to raise their prices to the level of internal prices. A bounty on a fixed but rising number of steel wagons was proposed on a decreasing scale for five years

with a view to encourage the wagon building industry. The manufacture of steel wire and wire nails and of agricultural implements was likewise protected by an increase in the import duty on foreign articles. The legislature endorsed all the recommendations of the Tariff Board except the last regarding the duty on agricultural implements, though it had been pointed out that the implements, though called agricultural, were used, as a matter of fact, mainly by railways, on plantations and in mines. The claims of industries connected with locomotives, steel castings and enamelled ware, which asked for protection, were not entertained on various grounds.

The report of the Tariff Board was submitted in February, 1924 and a special session of the legislature sanctioned its recommendations four months later. A contingency which the Board had anticipated and provided for, occurred very soon after its recommendations had been embodied in the Steel Industry (Protection) Act. The Tata Iron and Steel Company applied to the Government of India, requesting that in exercise of the powers under section 3 (4) of the Indian Tariff Act, 1924, the protective duties on imported steel should be increased on the ground that steel was coming into the country at prices which rendered the protection granted to the indigenous industry, ineffective. The Tariff Board to which the application was referred for investigation, found that the complaint of the Tata Company was borne out by facts and recommended that as inadequate protection was worse than useless, offsetting duties should be imposed so as fully to cover the gap between the lower prices of imported foreign steel and those which the company ought to receive. The rise of exchange to 18 d., the heavy imports of low priced Belgian steel and the large accumulation of stocks in the internal markets, had combined to render protection nugatory, and the Board advised that prompt action should be taken by government. It was recognized "that the proposed additional duties on unfabricated steel may appear very drastic, the increased duty being rather more than double the original duty in one case and rather less in the remainder."[1] The consumer would have to pay high prices but there was no escape from the sacrifice if the policy of protection which the country had adopted, was to be effectively carried out. The Government of India accepted the finding of the

1 **Report of the Indian Tariff Board regarding the Increase of the Duties on Steel.**

Tariff Board that the steel industry did require additional protection but substituted for the proposed increase of import duties, bounties not exceeding Rs. 50 lakhs for one year from 1st October, 1924 to 30th September, 1925. It was announced, at the same time, that the whole matter would be reviewed before the expiry of this period to ascertain what further action, if any, was needed. The Tariff Board accordingly made its third inquiry and recommended the payment of bounties on the manufacture of steel, subject to a limit of Rs. 90 lakhs and other measures. The question was to be re-examined before the end of 1926–27.

The acceptance of the policy of protection encouraged a number of industries to apply to the Government of India for tariff assistance. The rise of the rate of exchange to 1 8d. handicapped most indigenous manufacturers in competition with their rivals; the general fall in prices abroad had also the same effect, and the tariff having been raised, as has been pointed out above, for revenue purposes, the raw materials of several industries came to be subjected to the 15 per cent. import duty while, in some cases, the competing manufactured goods came in at a lower duty. On the advice of the Tariff Board, government removed the duty on sulphur which hampered the development of chemical industries. The claims of the paper, cement, printer's ink and magnesium chloride industries were referred to the Board in 1924, and each one of these cases had peculiarities of its own. The productive capacity of indigenous cement factories exceeded the internal demand and the severe competition among them had led to price cutting on a considerable scale. The duty on printer's ink was 2½ per cent. while the materials required for its manufacture were subjected to a duty of 15 per cent. Paper made out of grass has merits of its own but it has a limited market in India, and the cost of the raw material which has to be transported over long distances to the mills is high. The possibilities of the manufacture of paper from bamboo appear to be promising provided it is established on suitable sites near the raw material and the cost of power can be kept low. Magnesium Chloride is practically a monopoly of Germany where it is a by-product and is disposed of in India, as in other markets, at very low prices. An important condition of discriminating protection not being satisfied, the Tariff Board rejected the claim of the industry to public assistance. A further batch of about nineteen applications

for the removal, reduction and rectification of duties on imported materials used in manufactures in India was remitted for investigation to the Tariff Board in 1925 and the coal mining industry also was inquired into. The case of the manufacture of machinery is interesting. It is a sound principle that raw materials and machinery should not be taxed or should be taxed very lightly. But manufacturers who aspire to turn out machinery in this country want their raw material to come in free or in the alternative, to subject imports of machinery to a high duty. The two claims are not easy to reconcile. Various other industries have put forward claims to protection and they are being investigated by the Tariff Board.

162. Steel and Imperial Preference.—The Tariff Board's fourth inquiry into the condition and claims of the steel industry was one which had been suggested by the Board in its first report in 1924 as necessary to enable the legislature to determine if the continuation of protection was required by indigenous steel manufacture after the expiry of three years. The Board found in the course of this fourth investigation that the policy of protection initiated in 1924 had achieved its aim, that it had encouraged increase in output and that it had made reduction of cost possible. It was estimated that the output of finished steel would rise from 163,000 tons in 1923–24 and 380,000 tons in 1926–27, to 600,000 tons in 1933–34 and that the average cost would be reduced from Rs. 126·5 per ton to Rs. 78·8 a ton in that period of ten years. Increased productive capacity combined with general economic depression all the world over, and in particular, the prevailing low rupee prices of steel had been the handicaps of the Indian industry which consequently needed continued protection, though on a smaller scale than before, for a further period of seven years. The Tariff Board ruled out the grant of bounties as calculated to throw an indefinite financial responsibility on government and proposed import duties at different rates on different kinds of steel. The imports of continental steel at low prices as compared with British steel (the two, between them, divided the Indian market) had been a serious disturbing cause which had upset calculations regarding intensity of foreign competition and the amount of protection required by the home industry. The Board discussed a number of alternative proposals and recommended, as the most suitable, its scheme of protection in which there was a basic duty fixed with reference to the probable

future price of British steel and leviable on steel of the British standard and additional duties that would be raised or lowered on all non-British steel.

This distinction between the treatment proposed for British and that for non-British steel had all the colour of discrimination made in favour of the former on the principle of Imperial preference, and consequently evoked a strong difference of opinion in and outside the legislature. The Tariff Board had made it quite clear that its preference for the scheme it supported was based entirely on economic grounds, particularly in view of the consideration that a uniform duty irrespectively of the country of origin would have to be unnecessarily high and would throw an unjustifiable burden on the consumers; and Government upheld this view and for self-same reasons. The opposition, on the other hand, refused to favour British at the cost of continental steel and thus to countenance the principle of fiscal preference. It supported, in a modified form, the alternative of uniform duties which the Tariff Board had examined and rejected and maintained that it was desirable on economic as well as political grounds to adopt a scheme of a uniform duty based upon the weighted average system with a basic duty which would not be altered for seven years. The opposition was not, however, united in this demand, and the view of the Tariff Board and the Government prevailed in the legislature. In any case, the industry secured a reasonable measure of protection which was guaranteed to it for a period of seven years, and which was to prove effective not immediately but in the course of that period. It is worthy of notice that the protection granted to Indian industries has by no means been excessive and has been given in doses just enough to enable them to live and progress as much with self-help and internal improvement as with outside assistance.

163. Cotton Textile Industry:—The case of the cotton textile industry was peculiar, and it likewise raised the issue of Imperial preference though incidentally. State assistance was sought in this instance not on the ground of an 'infant' industry requiring fiscal protection but because one of the oldest industries of India was threatened with the prospect of destruction owing to continued depression and especially to 'unfair' Japanese competition. The long-standing complaint of the textile industry viz. the excise duty, had now been removed and there was at least no direct competition

between Lancashire and the Indian mills. In fact, the British and the Indian industries both suffered from the competition of Japan in the Indian market as the Japanese manufacturers could sell their goods in India and the eastern parts of Asia generally at low prices. It was urged that Japan had the advantage of exchange on its side and that whereas the Indian mill-owners had to pay high wages to their labourers whose hours of work had been definitely restricted by law, their competitors from the Far East were in a favourable position in that respect as Japan had not yet adopted the convention of limited hours. The Indian mills had been working at a loss, and imports of Japanese cloth were steadily increasing, with the result that the market for indigenous yarn and cloth in this country and outside, was becoming narrower and the industry was threatened with a disaster unless timely steps were taken to check imports from Japan. The Indian millowners were advised to get their case thoroughly investigated by a special body of inquiry, and the cotton textile Tariff Board came thus to be appointed.

On a careful examination of the whole position, this Board came to the deliberate conclusion that 'there is unfair competition between Japan and India, and that this competition is an important cause of the present depression in the cotton textile industry.' It found that the mills in Bombay were in a more unfavourable position compared with those in upcountry centres owing to higher wages and higher costs of fuel and other items and greater distance both from the raw material and the consuming markets. The Board, therefore, felt called upon to make several recommendations with a view to the introduction of economy and improved methods of management, and by a majority (it was divided) favoured the addition to the existing *ad valorem* duty of 11 per cent., of a duty of 4 per cent. on all cotton manufactures other than yarn. A bounty was also proposed on the production of yarn of counts 32s and over with a view to encourage the development of the industry and to provide funds required for meeting the cost of the bounty. The president of the Board did not agree with his colleagues in the matter of the bounty and held that 'a long established industry such as the cotton textile industry in Bombay should need no stimulus at the expense of the general tax-payer to a development which is in its own interests.' He did not likewise agree that 'an all-round increase in the present eleven per cent duty can be justified.' He, therefore, recommended

the imposition of a differential duty of 4 per cent. on all cotton manufactures imported into India from Japan, to be imposed with reference to the terms of the Anglo-Japanese convention of 1905.

The Government of India declared its inability to accept the recommendation of the majority of the Board that the spinning of the higher counts of yarn should be stimulated by the grant of a bounty, and agreed in this respect with the president. It felt satisfied that, on the facts as found by the Board, no case had been established for a general increase in the duty as a measure of protection. But it did not also accept the proposal of the president and attached no weight to the unanimous view of the Board as to the reality of Japanese competition and the need of protection for Indian mills. The advantage enjoyed by Japan over India on account of labour conditions in that country, was in the opinion of government, already sufficiently covered by the existing revenue duty of 11 per cent. and therefore it did not justify any increase therein. Government thought that the proposed removal of the import duty on machinery and on the materials of industry was reasonable and showed its readiness to give effect to it as revenue considerations permitted. It was here possible to avoid most of the difficulties presented by the problem and yet to grant protection to the textile industry by raising the general duty on imports of cotton cloth and granting exemption from the increase to manufactures exported to India from within the Empire. This would mean the adoption of the principle of Imperial preference but would not involve complications regarding trade conventions while it would extend to the indigenous industry the protection it asked for against Japanese competition. There was, of course, the consideration involved here of the probability of British competition increasing and creating trouble for the Indian industry and the certainty of political opposition in the country to Imperial preference. The help which the cotton mill industry was ultimately able to secure was the relief in connection with import duties on machinery and stores and on foreign yarn.

164. Position and Prospects:—The trend of thought in the world to-day, in matters fiscal, is of a two-fold character. The dislocation and damage which trade and industries have suffered in Europe owing to the effects of the War, have led thinkers and statesmen to consider with favour the desirability of lowering tariff

walls and of bringing the nations closer so as to facilitate and promote their mutual commercial intercourse; and the "United States of Europe" has been put forward as an ideal for European countries. It is, of course, intended not that people should abandon their national fiscal policies but only that they should moderate the rigour with which protectionism is enforced. Difficult as this change is for continental countries, the position of free trade Great Britain is peculiar. There international freedom of exchange comes in conflict with the development of Imperial resources and preferential trade within the Empire, and the old fiscal controversies have consequently been recently revived. The position of India in a scheme of Imperial preference is once more a subject of discussion.

"Discriminating Protection" is the accepted policy in this country, and the government is being urged to pursue it with greater vigour. Among the industries which have received relief or assistance in recent years, may be mentioned the manufacture of matches. The high revenue tariff raised during war time, gave a stimulus to the industry, and the Tariff Board recommended that the duty should be continued as a measure of protection. The Swedish trust has firmly established itself in India, as in other countries; nevertheless the purely indigenous enterprise has benefited by protection and has improved and expanded production. The manufacture of superior qualities of salt in India so as to render her independent of imports from abroad has also been investigated. The factors which play an important part in international competition and have to be carefully considered in the discussion of protective measures, have been adverted to before. Tastes of consumers, distance of factories from fuel, raw materials and markets, costs of transport, volume of effective demand and prices are the chief decisive elements which have a theoretical as well as a practical importance of their own. Reports of the Tariff Board on the various industries which have claimed protection, throw an interesting light on this aspect of the problem of protection, and the attention of industrialists and students of Economics in India, is earnestly invited to it.[1]

Indian enterprise and organization will have to be intelligently applied if indigenous industries[2] are to make a headway in interna-

1 Read the Author's "Economics of Protection in India."

2 Refer to the position of Indian textile and cement industries.

tional competition, and the State will have to adopt a national attitude in promoting their development. The commercial possibilities of the manufacture of bamboo pulp in India, particularly in Burma, have been demonstrated and it is now announced that the enterprise has already been taken up by two powerful capitalist groups in England. The determination of the place of Burma in the federal constitution of India has a vital importance in view of the nation's fiscal policy and future industrial development. International cartels and the competition of such foreign enterprise within and outside the country, are elements in the situation that need to be carefully watched and Indian policy and economic organization must be suitably adjusted to possible developments. The world is moving fast, and India is notorious for immobility. In this poor and predominantly agricultural country, the responsibility of the State is, therefore, tremendous, and the weight of educated public opinion has to be persistently brought to bear upon it to make it do its duty to the people. The close relation between economic progress on the one side and national policy and political power on the other, need not be further emphasised.

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APPENDIX

(A)

REPORT OF THE INDIAN FISCAL COMMISSION (1921-22.)

Questions relating to the right fiscal policy for India, Indian fiscal autonomy and Imperial Preference, have been discussed at considerable length in the body of this volume. The Indian Fiscal Commission dealt exhaustively with this whole problem, and its Report was published towards the close of September, 1922. As we suggested in an earlier edition in the Chapter on Commercial Policy, complete unanimity among the members of the Commission was not possible, and a minority of five including the President, appended to the Report, a Dissenting Minute emphasising their points of difference with the majority. The dissent caused surprise to some, among them being members of the Commission, who thought that a unanimous report could and should have been sent forward—and had in fact been prepared after a good deal of discussion, and that the dissent was nothing more than an after-thought so far as the main recommendation was concerned and only a supplementary explanatory note in other respects. We felt it would be instructive to our readers if we gave a brief summary of the recommendations and views of the majority and the dissenting minority with the object of bringing out clearly the main lines of fiscal policy chalked out by the Commission and the specific points stressed by the dissenting minority. First of all, we extract a summary of the recommendations of the Commission as given in its Report :—

Reference.

"To examine with reference to all the interests concerned the Tariff policy of the Government of India, including the question of the desirability of adopting the principle of Imperial Preference, and to make recommendations."

Preliminary Conclusions.

That the industrial development of India has not been commensurate with the size of the country, its population, and its natural resources, and that a considerable development of Indian industries would be very much to the advantage of the country as a whole.

Principal Recommendations.

1. (a) That the Government of India adopt a policy of Protection to be applied with discrimination along the lines indicated in this Report ;

(*b*) That discrimination be exercised in the selection of industries for protection and in the degree of protection afforded, so as to make the inevitable burden on the community as light as is consistent with the due development of industries ;

(*c*) That the Tariff Board in dealing with claims for protection satisfy itself :

(1) That the industry possesses natural advantages ;

(2) That without the help of protection it is not likely to develop at all, or not so rapidly as is desirable ; and

(3) That it will eventually be able to face world competition without protection ;

(*d*) That raw materials and machinery be ordinarily admitted free of duty, and that semi-manufactured goods used in Indian industries be taxed as lightly as possible ;

(*e*) That industries essential for purposes of National Defence, and for the development of which conditions in India are not unfavourable, be adequately protected if necessary ;

(*f*) That no export duties ordinarily imposed except for purely revenue purposes, and then only at very low rates but that when it is considered necessary to restrict the export of food grains, the restriction be effected by temporary export duties and not by prohibition ;

2. That a permanent Tariff Board be created whose duties will be, *inter alia*, to investigate the claims of particular industries to protection, to watch the operation of the Tariff, and generally to advise Government and the Legislature in carrying out the policy indicated above ;

3. (*a*) That no general system of Imperial Preference be introduced ; but

(*b*) That the question of adopting a policy of preferential duties on a limited number of commodities be referred to the Indian Legislature after preliminary examination on the several cases by the Tariff Board ;

(*c*) That if the above policy be adopted, its application be governed by the following principles :—

(1) That no preference be granted on any article without the approval of the Legislature ;

(2) That no preference given in any way diminish the protection required by Indian industries.

(3) That preference do not involve on balance any appreciable economic loss to India ;

(d) That any preference which it may be found possible to give to the United Kingdom be granted as a free gift ;

(e) That in the case of the other parts of the Empire preference be granted only by agreements mutually advantageous ;

4. That the existing Cotton Excise Duty in view of its past history and associations be unreservedly condemned, and that Government and the Legislature start again with a "clean slate" regulating their excise policy solely in the interests of India.

Subsidiary Recommendations.

5. That the proviso to Section 20 of the Sea Customs Act be repealed and that Customs Duty be ordinarily levied on goods belonging to Government.

6. That difficulties in the shape of shipping rebates or unfair advantages like dumping, depreciated exchanges, bounty-fed imports from abroad, be investigated and, where possible, removed ;

7. That industrial development be promoted by giving a more industrial bias to primary education and providing opportunities for training apprentices, and organizations for increasing the mobility of labour ;

8. That no obstacles be raised to the free inflow of foreign capital, but that Government monopolies or concessions be granted only to companies incorporated and registered in India with rupee capital, such companies to have a reasonable proportion of Indian Directors, and to afford facilities for training Indian apprentices ;

9. That the Tariff be not ordinarily employed for retaliation, or as a means of aggression ;

10. That the Tariff be elaborated with a view to remove ambiguities, and that the system of specific duties and tariff valuations be cautionsly extended ;

Summary of Views Embodied in the Report.

After a few introductory observations, the Report proceeds to trace the history of the Indian Tariff from the time of the Mogul Empire. In those days customs duties were low, rarely exceeding 5 per cent. *ad valorem*, though there prevailed an elaborate system of internal transit dues which impeded trade. In the early years of the East India Company's rule, a low tariff was maintained and inland duties were abolished. Until 1848, goods imported in foreign ships had to pay double duty. After that date and until 1859, foreign goods had to pay that penalty irrespectively of the nationality of

shipping. Immediately after the Mutiny the tariff was raised, and in later years there was a gradual reduction. Export duties had been an integral part of the system, being generally levied at the rate of 3 per cent. *ad valorem*. Improvement of the financial position of Government was utilized to lower and finally to abolish the customs duties altogether. "The partial abolition of the cotton duties in 1878 and 1879 led on in 1882, to the abandonment not only of the remaining cotton duties, but of the whole of the general customs duties, the Government of India concluding that the duties still existing caused an amount of friction, scrutiny and interference with trade quite incommensurate with the net revenue they produced." In 1867 the export duty schedule was reduced from 97 items to 9, and after 1880, 3 annas per maund on rice was the only lingering duty on exports. "From 1882 to 1894, no import duties were levied in India, with the exception of the duties on arms and ammunition which were retained for administrative purposes, the duties on liquors, opium and salt which were complementary to the excise policy, and a duty of ½ anna per gallon on petroleum which was imposed for revenue purposes in the year 1888." Financial embarrassments forced Government to reimpose a low tariff in 1894, and on the pressure of Lancashire, the duty on cotton piece goods was lowered two years later, to 3½ per cent, and an equivalent excise duty was levied on Indian mill-woven cloth.

This low revenue tariff remained in force till the outbreak of war which necessitated a revision and a considerable enhancement of the customs duties. Export duties too had to be revived, to be imposed on jute, tea and hides, and a high revenue tariff was found to be financially indispensable even after the close of the war. "It is obvious that the 1922 tariff has travelled a long way from the tariff in force before the war. The general rate of duty is no longer low, and wide breaches have been made in the old principle of uniformity. Omitting a free list, we have now an important class taxed at 2½ per cent, a second important class at 10 per cent, and a third at 30 per cent., while such largely consumed commodities as cotton piece goods, cotton yarn, sugar, petroleum and matches in addition to liquors and tobacco are taxed at special rates." Increasing reliance is being placed upon customs revenue which now bears a higher proportion to the total revenue than it used to do before.

The third chapter of the Report is devoted to a description of the economic position in India. An account is given of the principal crops and of their exports, and the possibilities of an improvement of the yield are indicated. The position with regard to the manufacturing industries is then reviewed and special mention is made of such factors as power, resources, labour, means of transport, supply of capital and the dimensions and distribution of foreign trade. The general conclusion drawn from the survey of the trade position is that "the United Kingdom still stands easily first among the countries supplying goods to India. She also takes more Indian

goods than any other single country, though the proportion seems to be diminishing. The two next most important countries in the matter of trade relations are the United States and Japan while the imports from Java and the exports to Germany are not inconsiderable." The general conditions in India are characterised as quite favourable to the steady growth of industries.

The importance of industrial development forms the subject of the fourth chapter. The advantages which the establishment and promotion of industries will bring to agriculture, labour, public revenues and to national character, are pointed out, and the report goes on to consider the fundamental question underlying the fiscal policy of India, viz. the choice between Free Trade and Protection. The fifth chapter opens with a statement of the pros and cons of the Free Trade vs. Protection controvesy, and the Commission lays down the conditions under which a policy of protection is justified and is calculated, all things considered, to prove beneficial. The general principle evolved out of the discussion is then applied to the special conditions obtaining in India. The chief question that required an answer was whether the industrial development universally desired in India could be attained without the stimulus of protective duties, and if not, whether the advantage to the country arising from this industrial development would out-weigh the burden which protective duties would impose. On a consideration of the different factors involved in the problem such as the industrial aptitude of the people, the abundant natural resources of the country and the difficulty of new industries being able to face outside competition without assured Government aid, the Commission came to the conclusion that protection was calculated to bring a very material gain to the country, in view of the desirability of industrial development and the impossibility of its taking place without the stimulus of protective duties. The Commission was strongly influenced in this connection by their belief that the limits of direct taxation had been reached in India and that the existing rates of the Income tax were detrimental to the progress of industries, and therefore by Government's necessity of deriving a high revenue from the Tariff. Since 1916, the tariff had become less and less consistent with purely free trade principles. It gives protection but it does so in the least convenient and the least beneficial way. "It is casual and haphazard." It appeared to the Commission, therefore, that "the necessity of raising a large revenue from customs duties and the obvious inexpediency of ignoring the effect of those duties on the industries of the country, must inevitably lead India to the adoption of a policy of protection as they led Germany in 1879." The disadvantages and the losses of protection are then set against the gains. The burden on the masses of enhanced prices due to protective duties is considered and the loss entailed by protection on the agricultural and the middle classes in particular, is given due weight. This danger of undue burden being thrown on the producer and the consumer, will not be serious, in the opinion of the

Commission, if protection is applied with discrimination along the lines recommended. Balancing all the factors of the problem, favourable and otherwise, the Commission comes to the conclusion that the advantage lies heavily on the side of protection, provided it is discriminately applied.

The subject of the disadvantages of protection and the need of discrimination, is further considered in chapter VI. The danger of political corruption will be overcome by the variety of interests represented in the Legislature and the proposed preliminary inquiry by an impartial body. The proper remedy against a combination of manufacturers will have to be devised and applied, when these dangers incidental to protection, raise their heads. Very great stress is laid on the principle of discrimination, adoption of which is calculated to restrict the rise of prices, to curtail the period during which the community will have to bear the burden of protection, to serve the best interest of industries by ensuring a steady and healthy development, and to minimise any adverse effect on the balance of trade.

The seventh chapter gives the outlines of the scheme of protection and draws a clear line of distinction between duties levied for purely revenue purposes and those fixed on protectionist principles. The former may be varied according to the revenue needs of Government but the latter must be modified only strictly according to the principles of protection. If the latter have to be enhanced to yield more revenue, the excess should be obtained by means of an excise duty plus an additional import duty. The proposed Tariff Board is to be an integral part of the whole scheme of protection, and that body must satisfy itself as to certain favourable conditions before it may recommend the imposition of protective duties. If protection given to one industry affects prejudicially the interests of others, an open public inquiry should be made of the whole question and the decision should be guided by the principle that "an industry should receive protection, even if it adversely affects the development of other industries, provided this results in a net economic advantage to the country." The rate and period of protection, the location and the national and basic importance of industries must be carefully considered, and protection by means of bounties may, in certain cases, be found preferable, especially when different interests are found to conflict with one another. Raw materials, machinery, coal and partly manufactured goods are specifically discussed. The question of the import duty on cotton yarn recently imposed, should be considered in all its aspects by the Tariff Board, as it involves keen divergence of interests and opinion.

The principal points in the eighth chapter, which deals with supplementary measures required for the development of industries, relate to the Railway rates policy and the proposed Rates Tribunal, improvement of railway facilities, lowering of coastal shipping rates, shipping rebates and measures against dumping. Anti-dumping legislation is recommended after a full

enquiry by the Tariff Board. The next chapter is devoted to a discussion of the general principles governing the imposition of excise duties, and illustrations are taken from the tax-systems of foreign countries. The justification and limitations of these duties are stated. They are to be ordinarily confined to industries concentrated in large factories or small areas, to be imposed for checking the consumption of injurious articles or otherwise to be levied for revenue purposes only. These principles are applied, in chapter X, to the Indian cotton excise duties. The history of these duties is then briefly reviewed, and the story of the selfish agitation of Lancashire against cotton import duties and the Secretary of State for India's surrender to it, is related in some detail. The strong feeling of resentment in India against the excise, though there is now a difference of 4 per cent. between it and the import duty on piece goods, is brought out, and it is recommended that the Government of India should "clean the slate" and take action with respect to the absolute repeal or retention of the duty, with the consent of the Indian Legislature.

The question of export duties forms the subject of the next chapter. The imposition of these duties for protection is deprecated and it is stated that even for revenue purposes they should be but sparingly used. Small cesses are an exception to this general rule. A duty on jute which is an Indian monopoly, is perfectly justifiable : one on raw cotton is not. Export duties on tea, rice, wheat and hides are examined on the basis of general principles and the abolition of the first of these is recommended. The twelfth chapter deals with restrictions on the export of food grains. In view of the contention that India's production of food is insufficient, it is maintained that the real problem in that connection is one of poverty and prices. Increased production is the true remedy, and artificial depression of prices will have a detrimental effect on the agricultural industry. Abnormal conditions may, however, be met by the imposition of an export duty. Imperial preference is discussed in the thirteenth chapter, which begins with a history of the problem. The question is dealt with in all its aspects and particularly with reference to India's trade with the Empire ; and the conclusion is deduced that the actual and possible gain to India from preference is small. Objections to Imperial preference are examined in detail, such as the fear that it may diminish protection, throw undue burden on the consumer and may affect Indian fiscal autonomy ; and the Imperial aspect of the problem and the sentiment of Empire are given considerable weight. The view that India can not grant extensive preferences without serious loss to herself and without increasing the burden to the consumer, is emphasised. Great stress is, however, laid, on the other side, on the services of the United Kingdom, the heart of the Empire, in maintaining the vast Commonwealth of Nations together and on the importance of India's co-operation with the Dominions in helping England to keep up its industrial and

commercial prosperity so as to be able to defend and strengthen the Empire in the interests of all the constituent parts of the organization. The Commission wishes India not to "turn her back on the principles of preference which have been adopted in the greater part of the Empire and are rapidly being extended to the remainder," and would not have India standing in a position of moral isolation within the Empire. It is stated that a free gift of preference from India, however small, will be welcomed by the United Kingdom as a gesture of friendship and as a proof that India realizes her position as a member of the Empire.

The fourteenth chapter is concerned with the discussion of questions relating to the form and application of the Tariff and examines the comparative advantages of specific and *ad valorem* duties. It also suggests various improvements in the exitsing practice in connection therewith. Foreign capital is the subject of the next chapter. The advantages to India of the import and the use of foreign capital are pointed out, particularly for the rapid industrial development of the country which is to be effected with the help of protection. Foreign capital means the most up-to-date methods and the newest ideas and its free use would accentuate increased industrialization. The existing distrust of foreign capital in India is referred to and various suggestions put forward for the restriction of its use, are examined and rejected as impracticable and injurious. Only in the case of Government concessions should stipulation be made with respect to rupee capital, Indian directors and so forth. It is believed that the present prejudice in India against foreign capital, will die out and it will be recognized that there is enough room for the Indian and the British in the field of industrial development in the country. The sixteenth and the seventeenth chapters deal with the relation of Indian States and the tariff and the constitution and functions of the Tariff Board respectively. Representation of the States on the Board is considered unnecessary, and their interests, it is believed, will be sufficiently guarded by the Board. An effort is made in the brief concluding chapter to remove the inevitable British feeling that the Commission's recommendations are calculated to prove detrimental to the industries of the United Kingdom. No real conflict of interests exists, it is said, between the two countries and even in the cotton trade and piece goods industry. Britsh manufacturers will gain rather than lose if India becomes more prosperous as a result of a policy of protection.

Minute of Dissent

The signatories of the Dissenting Minute disapprove of the halting nature and the apologetic tone of the majority report, and would have liked the Commission to make a more emphatic, determined and enthusiastic pronouncement on the question of protection in accordance with the almost una-

nimous wishes of the Indian people. The reasons which necessitated the *Minute are given thus*:—

(*a*) The main recommendation has been hedged in by conditions and provisos which are calculated to impair its untility.

(*b*) In places the language employed is half-hearted and apologetic.

(*c*) We are unable to agree with the views of our colleagues on Excise, Foreign Capital, Imperial Preference and the constitution of the Tariff Board.

While the majority recommend a policy of protection to be applied with discrimination "along the lines of the Report", the dissenting members *recommend that "a policy of protection* should be adopted in the best interest of India". The importance of discrimination is indeed admitted and the need of safeguarding the interests of the consumer is fully recognized. There is no difference of opinion as to the desirability of trying to attain the object of protection with the minimum of national sacrifice. But it is *felt that the conditions laid down as governing the application of protection,* are too stringent such as will entail considerable delay and will not produce adequate results. Fault is found with the statement of the majority that "India for many years to come is likely to concentrate on the simpler forms of manufactured goods" as one that will fetter the discretion of the Government *of India and the Indian Legislature. An intense policy* of industrialization is, therefore, recommended, and immediate steps are to be taken to give effect to it. The discrimination that will have to be inevitably exercised may be safely left in the hands of the Government and the Legislature.

After showing this fundamental difference with the majority report, the dissenting minute proceeds, in the second chapter, to discuss the question of Excise Policy. The view taken in this regard is that "excise duties *should be restricted to such articles as alcohol* and tobacco which are regarded as injurious to public health and to public morality and the consumption of which it is desirable to check and to a few luxuries". This is the system adopted in the U. S. A. and the British Colonies. The examples of France and Japan, quoted on the other side, are examined and shown to be inapplicable to the case of India. Stress is laid on the fact that England did not impose an excise on motor cars though there was a heavy import duty on foreign motors during the war. The burden of an excise duty on Indian cloth is shown to be undesirable from the poor consumer's point of view. It is finally said that the exercise of discretion by the Legislature in the matter of cotton excise, as recommended by the majority, does not arise because the *policy recommended* is unsound in principle and the vote of the Assembly has no binding effect.

The question of cotton excise is discussed at length in the third chapter, and very great importance is attached to its proper solution. Exception

is taken to the recommendation of the report that the British Government should announce its intention of allowing the Government of India to decide the question of cotton excise duties in agreement with the Indian Legislature, as casting a doubt on the fiscal freedom conferred on India. The dissenting members fail to understand why financial difficulties of Government should have been pleaded against the repeal of the excise duty, which was imposed not for the purpose of revenue but only to satisfy Lancashire, when the majority did not hesitate to recommend the reduction or abolition of many export duties specifically levied for revenue. If there is to be "a clean slate" *as suggested by the majority, the cotton excise duty* must go, especially as the country unanimously demands its abolition.

In the foruth chapter, the Minute comes to Imperial Preference, and its conclusion with respect to it is that "India can not accept the principle until she has attained responsible Government and is able to regulate her fiscal policy by the vote of a wholly elected legislature. The question can become a matter of practical politics when the promised goal of responsible Government is reached. It may be contended that this would mean the indefinite postponement of the application of the principle of preference. To this the minority replies that it is prepared to recommend that the power of initiating, granting and withdrawing preference should be vested in the non-official members of the Legislative Assembly. The difficulties involved in granting of *preference to a country, from the point of view of a combination among the* favoured manufacturers and the high non-competitive prices charged to the consumers, are pointed out. Objection is taken to the majority report pleading for Imperial Preference on the ground, amongst others, of Great Britain's sacrifices in maintaining the British Navy. The naval defence of the Empire stands on a different footing altogether, and no useful purpose is served by mixing it up with the question under consideration. Preferential trade with the Dominions must be considered from a different angle of vision. Unless the claim of Indians to equality of status is conceded, there can be no reciprocity in trade relations with the self-governing Colonies.

The question of foreign capital is treated in the fifth chapter. The distinction drawn by the Majority between companies getting Government concessions and those establishing themselves behind the tariff wall created under a policy of protection, is not appreciated. It is pointed out that there is really no distinction between Government granting subsidies or bounties out of taxation money and allowing an industry to tax the people directly by means of higher prices resulting from protective duties. In both cases it is the people of India who have to pay the price either as tax-payers or as consumers. The fallacy underlying the argument of the Majority that "whether the immediate profit goes to a foreign or an Indian capitalist, the main and ultimate end, namely the enrichment of the country, will be attained," is exposed. The confusion between loan and ordinary capital made by the Majority is referred

to and it is stated that there would be no objection to foreign capital receiving the advantage of protective duties provided suitable conditions are laid down to safeguard the essential interests of India. If the Majority recommendations in this behalf are accepted, it will be open to every foreigner to establish industries in this country "by means of companies incorporated in their own country and currency." This danger did not exist under a policy of free trade, but is bound to materialise when the benefit of protective duties is available. Foreign firms may be allowed to be established in India on condition that they have rupee capital, that they have a reasonable proportion of Indian directors and that proper provision is made by them for the training of Indian apprentices.

The sixth chapter considers the constitution of the Tariff Board. The Board should consist of three members. The chairman should be a trained lawyer of the status of a High Court Judge and the two remaining members should be men elected by the non-official members of the Legislative Assembly and "men of ability, of integrity and of impartiality." To the three members should be added two assessors representing trade, commerce and industry and elected by the leading mercantile chambers and associations. The conclusion emphasises that no limitations such as those hinted in the main report, should be placed in the path of India's industrial development and that her economic problem, at least after the experience of the war, must be examined in a spirit of broadminded statesmanship.

APPENDIX

(B)

EXTERNAL TRADE OF INDIA IN 1928-29.

The foreign trade of India has not only reached its pre-war position but has passed those limits. The latest facts and figures relating to exports, imports, prices, exchange, balance of trade &c., are therefore interesting and we take the following extracts from the Review of the Trade of India in 1928–29.

The monsoon of 1928 was characterised by a marked deficiency of rainfall in the north-west of India, including the United Provinces, where persistently dry weather prevailed for a considerable time. The monsoon rains were also slightly in defect in Central India, the Central Provinces, Mysore and Madras, but normal or slightly above normal elsewhere. At the beginning of the retreating period of the monsoon exceptionally heavy rains occurred along the east coast of Madras resulting in floods : and the rainfall during the period was largely in excess over the whole of Northern and Central India, and normal or slightly above normal in the Peninsula. Taking the year as a whole, the rainfall was within 25 per cent. of normal except in Sind where it was very defective. At the end of January and the beginning of February exceptionally cold weather and frost over the whole of the north of the country did serious damage, particularly to the Gujarat cotton crop. These varying weather conditions affected the various crops differently. The rice crop of 1928–29 was, on the whole, good, being 12 per cent. more than in 1927–28, due mainly to favourable weather conditions in Bengal and Bihar and Orissa. The season, however, was unfavourable in deltaic part of Burma and owing to this, the exportable surplus of India and Burma together was considerably reduced.

POOR WHEAT CROP.

The wheat crop of 1928 was a poor one, showing a decrease of 13 per cent. as compared with the preceding year. Although the prospects of this crop were promising at first, unfavourable conditions in the Punjab in the later part of the season affected it adversely. The cotton crop of 1928–29 had been satisfactory till the end of January, 1929, when the prospects were marred by a severe cold-wave and frost. Consequently the production ultimately turned out to be about 325,000 bales less than in the preceding

year, inspite of the fact that the area devoted to the crop exceeded the preceding year's area by over one and a half million acres.

The jute crop of the year under review was less than in the preceding year by 282,000 bales on an area about 230,000 acres short of the preceding year's area. The crop may, therefore, be regarded as favourable on the whole. As regards the oil seed crops of the year the yield of groundnuts was favourable, being 11 per cent. greater than in the preceding year. On the other hand, the yield of winter oilseeds (rape and mustard, and lineseed) of 1928 and of the sesamum crop of 1928-29 was less than in the preceding season. The sugarcane crop suffered in the year under review, as the climatic conditions in the United Provinces, the most important sugarcane-growing region, were not favourable. On the whole, it will be seen that the condition of most of the crops was fair to good, except in the case of wheat where it was distinctly unfavourable.

LABOUR UNREST.

The year was marked by labour unrest in many Indian industries, the most important being the long-drawn-out strike in the Bombay cotton mills. This strike which started in April, 1928, lasted till October of that year and, though work was resumed then, really settled conditions had not been reached even by the end of the financial year, when a new strike started. The strike in Bombay affected the trade of India to a considerable extent. There was also a strike in the Tata Iron and Steel Works at Jamshedpur which lasted from the middle of September, 1928. Strikes amongst railway employees took place in Southern India and there was general unrest among other railway employees also. The occurrence of these strikes had a disturbing effect on the economic life of the country which was reflected in the trade statistics of the year. Apart from labour conditions, India can be said to have gone through a period of settled and fair conditions in other economic matters.

EXCHANGE FAIRLY STEADY.

Exchange was fairly steady and India's credit in the capital market was at a high level. The only event which created some stir in the financial circles in India was the raising of the Bank rate to 8 per cent. in February, 1929. This action, however, was necessitated by the increase in the Bank of England rate consequent on the increase in the Federal Reserve Bank rate. As regards the financial conditions of the Central Government the revenue position continued satisfactory, the revised estimates for 1928-29 closing with a surplus of Rs. 30 lakhs instead of one of five lakhs of rupees estimated in the Budget. This balance was credited to the Revenue Reserve Fund. The Budget Estimate for 1929-30 is Rs. 1,20 lakhs worse than that for 1928-29, so that instead of a surplus of Rs. 30 lakhs, it is anticipated that there will be a deficit of Rs. 90 lakhs.

DOWNWARD TREND OF PRICES.

Prices in India were generally on a downward trend, though the decline was not of any great magnitude. In April, 1928, the Calcutta index number of wholesale prices was 146. By July it had increased to 148. Next month, however, there was a fall of 5 points and the index numbers varied between 142 and 146 throughout the remaining part of the year. In March, 1929 the index number was 143. On the whole, therefore, it can be said that the index number for all commodities was fairly steady round about 145. As regards prices of particular commodities, except in three or four cases, the changes were not of any great magnitude. The most important fall in prices was recorded in the case of hides and skins which declined by nearly 26 points between April, 1928 and March, 1929. In April, 1928 the index number was 156. Throughout the next four months there was a continuous decline in prices and in July and August the index number was 115. From that date prices steadily increased, although there was a weakening in January and by March, 1929 the index number was 130. The index number for jute manufactures declined from 152 in April 1928 to 139 in March 1929.

The economic conditions of the world in general in 1928 were tending to greater and greater stabilisation and conditions in industry and trade were slowly progressing in a favourable direction. An important factor in the year under review was the continuation of the process of stabilisation of currencies in European and other countries.

As regards the world agricultural situation, the outturn of the cotton crops of the United States of America and Egypt in 1928 was higher than in the preceding year. The wheat crops of Canada and the United States of America of the same year were also good. Siam and Indo-China had bumper rice crops as in the preceding year. It may be stated that the agricultural conditions in the world were, on the whole, favourable and there were generally good crops in most countries.

IMPORTS AND EXPORTS.

TRADE IN COTTON PIECE-GOODS STATIC.

The total value of the imports of merchandise into British India in 1928-29 advanced by Rs. 3 crores or 1 per cent. to Rs. 2,53 crores, while that of exports rose by Rs. 9 crores or 3 per cent. to Rs. 3,38 crores. A broad review of the course of trade during the year shows the following interesting results. On the import side, the trade in cotton piece-goods was more or less in a static condition, the total imports having declined only by 87 million yards to 1,937 million yards and by Rs. 1,32 lakhs to Rs. 53,81 lakhs. Grey goods, imports of which amounted to 839 million

yards valued at Rs. 20,19 lakhs, accounted for a decline of 37 million yards in quantity and of Rs. 1,06 lakhs in value, owing primarily to a remarkably heavy reduction in the off-take of bordered grey goods. Under white goods, the requirements of the Indian markets for the year fell off slightly from 556 million yards to 554 million and the value showed a decline from Rs. 15,42 lakhs to Rs. 15,34 lakhs. Under coloured, printed or dyed goods, the size of the trade showed a small expansion from 505 million yards to 507 million yards, although the value shrank from Rs. 17,52 lakhs to Rs. 17,35 lakhs. Imports of cotton twist and yarn receded from 32 million lbs. to 44 million lbs., owing chiefly to a curtailment of the requirements of Bombay mills. Among other textiles, artificial silk (including yarns and manufactures) declined from Rs. 5,49 lakhs to Rs. 4,77 lakhs. The value of imports of silk, raw and manufactured, also fell off from Rs. 5,06 lakhs to Rs. 5,01 lakhs and that of imports of wool and woollens from Rs. 5,37 lakhs to Rs. 5,02 lakhs.

IMPORTS OF SUGAR.

Imports of sugar, including molasses, were stimulated by the low prices ruling in the world market and reached 937,000 tons valued at Rs. 16,09 lakhs, an advance of 114,000 tons in quantity and of Rs. 1,18 lakhs in value. There was a weakening of demand for iron and steel manufactures, imports of which declined from 1,197,000 tons to 1,170,000 tons in quantity and from Rs. 21,44 lakhs to Rs. 20,24 lakhs in value. The year's imports of machinery and mill-work (which under the new system of classification adopted in April, 1928 includes railway locomotive engines and tenders and parts) were valued at Rs. 18,36 lakhs. The value of identical items for 1927-28 works out at Rs. 16,92 lakhs.

The increased use of motor vehicles in India was reflected in larger imports, the value of the trade increasing from Rs. 6,17 lakhs to Rs. 7,72 lakhs. Concurrently with this there was a complementary increase in the import value of rubber manufactures from Rs. 2,71 lakhs to Rs. 2,86 lakhs. Imports of hardware were valued at Rs. 5,23 lakhs, which showed a very small decline of Rs. 1 lakh. Inspite of a decline in the absorption of fuel oils in the Bombay mills, imports of mineral oils rose in quantity from 232 million gallons to 242 million gallons, the value showing a comparatively small gain from Rs. 10,44 to Rs. 10,70 lakhs. Imports of kerosene oil advanced from 94 million gallons valued at Rs. 5,39 lakhs to a new record of 105 million gallons valued at Rs. 5,76 lakhs, part of this increase being attributable to the price-cutting war in the Indian markets during the early quarter of the year.

FALL IN RAW COTTON IMPORTS.

The value of provisions receded from Rs. 6,41 lakhs to Rs. 6,21 lakhs, the most important single cause for the decline being a reduction in the prices

of vegetable product under the pressure of competition. Imports of raw cotton, declined from 66,000 tons valued at Rs. 6,74 lakhs to 29,000 tons valued at Rs. 3,90 lakhs, owing to a decline in the consumption of the Bombay mills. Imports of liquors declined from 7,118,000 gallons valued at Rs. 3,67 lakhs to 6,790,000 gallons valued at Rs. 3,57 lakhs. Receipts of paper and pasteboard increased from 2,089,000 cwts. to 2,313,000 cwts. in quantity and from Rs. 3,01 lakhs to Rs. 3,30 lakhs in value. An abnormal development in the import trade of the year was a remarkable increase in the imports of wheat from 69,000 tons to 562,000 tons in quantity and from Rs. 1,09 lakhs to Rs. 8,17 lakhs in value due to the shortage of the local crop in India.

INCREASE IN JUTE EXPORTS.

Coming to the export side, the total value of raw and manufactured jute shipped during the year amounted to 80 crores against Rs. 84 crores in the preceding year. Shipments of raw jute increased by 6,000 tons in quantity to 898,000 tons and by Rs. 1,69 lakhs in value to Rs. 32,35 lakhs. Under Jute manufactures gunny bags recorded an advance from 463 millions valued at Rs. 23,27 lakhs to 498 millions valued at Rs. 24,93 lakhs in response to the increased demands made by the sugar and wheat trades of the world, while gunny cloth exported supplemented this gain by an increase from 1,553 million yards to 1,568 million yards in quantity and from Rs. 29,94 lakhs to Rs. 31,64 lakhs in value.

EFFECT OF BOMBAY STRIKE.

There was also an improvement of Rs. 17,62 lakhs or 31 per cent. in exports of raw and manufactured cotton, the total declared value for the group having been Rs. 74,49 lakhs. The increase was due entirely to an improvement in exports of raw cotton, which advanced by 38 per cent. in quantity from 480,000 tons to 663,000 tons and by 39 per cent. in value from Rs. 47,72 lakhs to Rs. 66,25 lakhs.

The reason for this increase in exports was the long-drawn-out mill strike in Bombay which reduced the home demand for raw cotton and depressed Indian prices in comparison with the prices of American cotton, thus turning the parity in favour of Indian and thereby encouraging exports.

The strike was also responsible for a decline in the exports of cotton manufactures which decreased in value by about 10 per cent. from 8,67 lakhs to Rs. 7,80 lakhs.

FOOD GRAINS EXPORTS.

There were violent reactions in the export trade in food grains and flour which showed a remarkable decline from 2.8 million tons valued at Rs. 42,92

lakhs to 2.3 million tons valued at Rs. 33,69 lakhs. Under rice alone, shipments of which amounted to 1.8 million tons valued at Rs. 26,47 lakhs, there was a reduction of 369,000 tons in quantity and of Rs. 7,54 lakhs in value. This was mainly due to the smaller exportable surplus of Burma, the two successive bumper crops in the important rice exporting regions of Indo-China and Siam and the prohibition of imports into Japan. The decrease in exports of food grains was further accentuated by a simultaneous decline in shipments of wheat from 300,000 tons to 115,000 tons on the quantity side and from Rs. 4,11 lakhs to Rs. 1,69 lakhs on the value side. The adverse statistical position in the world's tea trade was abundantly reflected in a decline in the value of shipment from Rs. 32,48 lakhs to Rs. 26,60 lakhs, although the quantities registered during the year showed only a very small decline from 362 million lbs. to 360 million lbs.

OIL SEEDS.

The value of shipments of oilseeds advanced from Rs. 26,69 lakhs to Rs. 29,63 lakhs, owing primarily to a steady development of the trade in groundnuts, which expanded in bulk from 613,000 tons to 788,000 tons. In spite of the depression in the leather industries of the United Kingdom and Germany, there was considerable vitality in the Indian trade in hides and skins, exports of which were valued at Rs. 9,56 lakhs as compared with Rs. 8,81 lakhs in 1927-28. Lac made a very significant contribution, its shipments having risen both in quantity and value from 544,000 cwts. with a declared value of Rs. 6,99 lakhs to 743,006 cwts. valued at Rs. 8,64 lakhs. There was also an appreciable improvement in exports of raw wool, the value rising from Rs. 4,36 lakhs to Rs. 4,89 lakhs. Among less important items, there was an interesting development in respect of oil-cakes, exports of which swelled in value from Rs. 2,53 lakhs in 1926-27 to Rs. 3,14 lakhs in 1927-28 and Rs. 3,84 lakhs in the year under review.

FALL IN RE-EXPORT TRADE.

The year witnessed some interesting movements in the re-export trade of India. The value of this trade declined from Rs. 9,54 lakhs in 1927-28 to Rs. 7,83 lakhs in 1928-29. As the bulk of the re-export trade usually passes through Bombay, the effect of the decline was naturally confined to that province alone, the value of its trade having fallen off from Rs. 6,94 lakhs to Rs. 5,02 lakhs and the percentage share from 73 to 64. The outstanding feature of Bombay's re-export trade was a decline in the shipments of non-Indian raw cotton from 2,790 tons valued at Rs. 44 lakhs to 500 tons valued at Rs. 9 lakhs and in those of foreign cotton manufactures (including twist and yarn) from Rs. 1,22 lakhs to Rs. 76 lakhs in value, as a result chiefly, of the establishment in East Africa of Japanese organisations which combine the selling of Japanese cotton textiles with the purchasing of African (Uganda) cotton.

Among other notable features of the trade of Bombay was a falling off in re-exports of sugar from 15,500 tons valued at Rs. 44 lakhs to 4,000 tons valued at Rs. 11 lakhs and in those of raw skins from 429 tons to 323 tons in quantity and from Rs. 1,92 lakhs to Rs. 1,53 lakhs in value.

BALANCE OF TRADE.

It will be noticed that the trade figures of the year 1928–29, as calculated on the basis of the declared value of 1913–14, are a record for both imports and exports. Imports in 1928–29 surpassed the figure for 1913–14. Similarly exports surpassed the pre-war figure as well as the record figure of 1924–25. The total trade in merchandise, excluding re-exports, was the highest on record. Prices of imports and exports declined by about three points each as compared with the preceding year.

The visible balance of trade in merchandise and treasure for the year 1928–29 was in favour of India to the extent of Rs. 52 crores compared with Rs. 50 crores in the preceding year, Rs. 40 crores in 1926–27 and the record figure of Rs. 109 crores in 1925–26. The net imports of treasure on private account rose from Rs. 32 crores to Rs. 34 crores, of which net imports of gold were valued at Rs. 21 crores and of silver at Rs. 13 crores. Net imports of currency notes amounted to Rs. 12 lakhs.